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SOLVENCY OF FUNDS AND BENEFIT FINANCING

FINANCIAL EXPERIENCE IN UNEMPLOYMENT INSURANCE DURING THE POSTWAR PERIOD, 1946-50, William H. Wandel 3
THE LUMBER INDUSTRY IN OREGON AND ITS EFFECT UPON UNEMPLOYMENT INSURANCE BENEFITS COSTS, Silas Gaiser 5
BENEFIT EXPERIENCE, NEW YORK STATE, 1938-50, IMPLICATIONS FOR BENEFIT FINANCING, Nathan Morrison 9
DEPENDENTS' ALLOWANCES—HOW MUCH DO THEY COST IN ARIZONA? Earl A. Heise 12
PENNSYLVANIA—A KEYSTONE ECONOMY, John F. Adams and Rolland S. Wallis 16
JOB ROTATION AND ITS EFFECT ON BENEFIT COSTS, Dr. Lewis F. Manly 21
WHY THE COSTS OF UNEMPLOYMENT INSURANCE BENEFITS HAVE BEEN CONSISTENTLY HIGH IN RHODE ISLAND, Thomas H. Bride, Jr 23
THE EFFECT OF SEASONALITY ON THE COST OF UNEMPLOYMENT INSURANCE BENEFITS IN UTAH, Sherrill W. Neville 26
IMPROVED OUTLOOK FOR STATE FUNDS, Report of Interstate Conference Committee 30

THE ITINERANT SERVICE PROGRAM IN KENTUCKY, Sidney L. Wyatt 32
OHIO PROMOTES EMPLOYMENT OPPORTUNITIES, Edward T. Fogo 35
CLEARANCE WORKS, Harry J. Willoughby 37
LITTLE RHODY LENDS BIG HAND TO SCHOOL DROP-OUT, Ruth Silberman 39

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In This Issue

DURING the five calendar years elapsing since the end of WWII, the Unemployment Insurance Program has moved through a variety of experience in benefit financing. Because of this, the period has been chosen by William H. Wandel for analysis in his introductory article, to determine what lessons it holds for future guidance of the States in reaching determinations on long-range financing of their UI programs. p. 3

OREGON'S lumber and wood-products industry alone accounts for approximately one-fourth of the State's covered payrolls. Consequently, this industry, with its seasonal, weather, transportation and high wage-rate problems has a heavy bearing on unemployment insurance benefit costs. p. 5

NATHAN MORRISON draws on New York's 13 years of experience in unemployment insurance payments to buttress his conclusions on the probable range of UI benefit costs during the next few years. p. 9

QUESTIONS about dependents' allowances—experiences with them, claimant characteristics, costs, and the like—are always being asked. Earl A. Heise answers some of them from his experience in Arizona. p. 12

DR. John F. Adams of Temple University and Rolland S. Wallis of the Pennsylvania agency discuss the results of a study of the complex industrial structure of the Keystone State's economy and its probable implications for long-range benefit financing. p. 16

JOB rotation, or "staggered employment," long in use in the worsted mills in Massachusetts, has a definite effect on the cost of UI benefits. Dr. Lewis F. Manly of Tufts College tells of this employment practice and its effect on benefit costs. p. 21

RHODE ISLAND is a manufacturing State, dependent mainly on three industries—textiles, metals and machinery, and jewelry—all of which are highly sensitive to seasonal or cyclical patterns. In recent years, outside competition has further complicated its problems. These and other economic factors have combined to keep costs of UI benefits consistently high in that State. Thomas H. Bride says Rhode Island must diversify its industrial pattern if it is to furnish sufficient employment for its labor force. p. 23

UTAH has a unique seasonal problem—one which grows out of the cumulative effect of seasonal lay-offs in nearly every industry in the State. How this affects UI benefit costs was recently surveyed by representatives of the BES and the University of Utah. p. 26

THE workers in the rural areas should receive the best service we can give them. Itinerant offices are the answer. Improvement in itinerant service was the purpose of the "test" office set up in the Bowling Green, Ky., local office. Rewarding results proved the test-office project was worthwhile. p. 32

WITH plants closing down and unemployment growing, Ohio found itself in a serious situation in the summer of 1949. Facing up to the problem, the Ohio Bureau of Unemployment Compensation devised a plan for keeping employers informed of requests for bids on Government contracts. The plan worked and the plants stayed open. p. 35

Women for Defense

THE Civil Service Commission called attention recently to the importance of hiring women to help in the present defense effort. Remembering the excellent work done by women in many lines of work during World War II, the Commission urged Government placement officers to hire women in the present emergency. The statement was issued as a result of the shortage of persons to fill a number of Federal jobs.

During the last war, additional numbers of women were hired by the Federal agencies for jobs usually performed by women, but more important was the increase of women in jobs generally held by men. Since the war, some agencies have continued to employ women in work usually performed by men. However, the number of women employed in such positions decreased as a result of reductions in the Federal working force, marriage, and the return to peacetime pursuits.

The number of women employed in the continental United States by the Federal Government reached a peak of 1,106,132 in July 1944. Today, about 532,500 are employed inside the country by the executive branch.

Thousands of women did technical and scientific work in civilian jobs in arsenals, navy yards, and airplane assembly centers during the war. In the beginning many of these women were hired as trainees—later to become various types of mechanics, mechanics' helpers, and technicians. In some cases they did light welding work and assembled aircraft parts. In other cases they served as engineering aids to professional research workers.

The war also brought increased employment of women in engineering, statistical, and cartographic draftsman positions, and in some cartographic aid positions. There was also an increase of women in professional fields such as chemistry, engineering, physics, and mathematics. The increase of women in these fields served as an incentive for many women to enter professional training in areas where previously there had been little opportunity for them.

Although the Commission encourages Federal personnel officials to hire women to fill these shortages, it advises against the employment of mothers of children under 16 years of age. During World War II the employment of young mothers resulted in special problems involving day nurseries, school feeding, and guidance. It is reasonable to assume, the Commission added, that women without children and those with grown children may have time to devote to outside work on a full- or part-time basis.

* * *

Employment of women by Federal executive agencies has increased 126,000 throughout the country since July 1, 1950, to a total of 532,500 on April 1, 1951, according to figures of the Civil Service Commission. Most of the increase occurred in the military departments, which reported 111,700 more women in April than before the beginning of the defense program. Women were hired to fill more than their usual share of the new jobs created by the emergency, despite the high proportion of blue-collar jobs in the military departments. Almost a fourth of all civilian jobs in the military departments are now filled by women.

About 2,100 of the jobs in the new control agencies created since July are filled by women, and defense functions assigned to old-line agencies accounted for about 12,200 of the increase. Six of the larger agencies (those with more than a thousand employees) have more women employees than men: Federal Security Agency, Selective Service System, Civil Service Commission, Office of the Housing Expediter, Office of the Secretary of Defense, and the Railroad Retirement Board. Seven smaller agencies also employ more women than men.

Employment Security REVIEW

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At press time

Gabele New IAPES President

RALPH E. GABELE of Columbus, Chief of Technical Services, Ohio Bureau of Unemployment Compensation, was elected president of the International Association of Public Employment Services at the Thirty-Eighth annual convention held early in June at Rapid City, S. Dak.

Gabele has been an employee of the Ohio BUC since December of 1938. During World War II he served as director of the Columbus area.

Long active in the affairs of IAPES, Gabele was given the post of president after serving a term as vice president of the organization. He is the second Ohioan to be elected to the presidency of IAPES, the first having been Fred Croxton, now of Washington, D. C., who headed the association when it was first formed in 1913.

B. C. Seiple, local office manager, BUC, Cleveland, was reelected treasurer, a post he has held continuously since 1927. Other officials elected at the meeting were: Clifford Hollister, Illinois, first vice president; Irene Gable, North Dakota, second vice president; Louis Tollefson, South Dakota, and Richard Donnell, Missouri, committeemen-at-large.

Canadian committeemen are: Fred White, Winnipeg, Manitoba, R. P. Hartley, New Brunswick, and Marcel Guay, Quebec.

The convention city next year is Atlantic City, N. J., and for 1953, Milwaukee, Wis.

GI Training Cut-off Date

THE Veterans' Administration recently answered questions about the July 25 cut-off date for starting GI bill training.

The July date applies to World War II veterans discharged before July 25, 1947—this includes most of those who served during the war. Veterans discharged after the 1947 date have 4 years from their discharge in which to begin training.

Many veterans have asked whether the filing of an application for training before the cut-off date is sufficient to enable them to train afterwards. VA's answer is "No." A veteran actually must be in training by the cut-off date in order to continue afterwards.

The VA will consider a veteran to be in training, even though he has temporarily interrupted his course for reasons beyond his control, such as the summer vacation. A veteran who had once started a course and now cannot resume it because he has returned to extended active duty is also considered to have been interrupted for a reason he cannot control.

Other veterans, in school under the GI bill during the regular school year, wanted to know whether they will be required to attend summer school in order to return to class this coming fall, after the cut-off date. VA said "No." Their summer vacation will be considered an interruption which is normal to all students—and therefore beyond their control—and they will be permitted to resume training this fall in the same field of study.

Many World War II veterans who have gone back into uniform have been concerned about the forthcoming cut-off date and how it will affect their future plans for GI bill study. VA advises that a veteran who interripted GI bill studies and since that time has reentered service will be permitted to continue his training after discharge, even if he gets out after July 25. His post-service training, which must begin within a reasonable time after discharge, will be limited by his remaining entitlement and the July 25, 1956, wind-up of the program. However, a veteran who has never started GI bill training, and has gone back into service, will be bound by the July 25 date.

Handicapped Over 40

PRELIMINARY announcement has been received of a conference on rehabilitation of the handicapped worker over 40, to be held July 11–13 at the University of Michigan.

Taking note of the fact that the Director of Defense Mobilization has said " . . . The Labor force engaged directly or indirectly in defense production will have to be increased by 3 or 4 million workers in 1951 . . .," the announcement reminds us that "The Nation's 2 million handicapped constitute a major reserve of

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stable and reliable potential workers which can be drawn upon to help fill our manpower needs."

The Conference objectives have therefore been set as follows:

To expand the Nation's manpower supply for the mobilization program by rehabilitating the handicapped worker over 40 into the labor force; to focus national attention on rehabilitation of this group as a means of avoiding a manpower shortage; to acquaint the public and voluntary organizations with up-to-date knowledge on the technical skills and scientific advances now available for rehabilitating this group; to encourage the use of this knowledge by spreading it more widely among existing community agencies and programs; to stress the common denominators in the problems to be overcome in rehabilitating all types of older workers; to provide a means of getting the attention and support of experts in all management, labor, professional and community groups concerned; to encourage cooperative community activity and effective working arrangements between public, professional and voluntary agencies; and to define areas and problems which seem to require priority for further research and study.

French Technicians Visit U. S.

A TEAM of 14 French technicians, headed by Jacques Frezouls, Associate Director for Manpower in the Ministry of Labor in France, is presently in the United States for the purpose of studying the organization of services and methods for physical and vocational rehabilitation. Representatives of the Labor Department, the Federal Security Agency and the Economic Cooperation Administration cooperated in preparing a program for the group.

In Washington, several members of the BES staff, headed by Director Robert C. Goodwin, discussed the Bureau's responsibilities and the use of employment counseling, testing, and selective placement techniques in serving the needs of disabled persons.

After spending a week in Washington to obtain an over-all picture of services available to the disabled, the French team embarked on a 4-week field trip to Cleveland, Buffalo, Toronto, New York, Raleigh, and Richmond. They expected to visit rehabilitation centers, hospitals, workmen's compensation agencies, rehabilitation agencies, and State employment services.

The group will spend a final week in Washington to clarify any questions concerning our methods, programs, and organization.

Seniors Take Aptitude Tests

APPROXIMATELY 100,000 high-school seniors took aptitude tests this year as part of a broad preemployment job counseling and placement program jointly conducted by local offices of State employment services and public and private schools.

The GENERAL APTITUDE TEST BATTERY is being used extensively in measuring the capacity of students to make good in various fields of work. This battery tests for 10 basic aptitudes in nearly 2,000 occupations in 20 broad fields of work.

Six years of experience have demonstrated that use of the GENERAL APTITUDE TEST BATTERY, as a part of the counseling and placement program, helps young people to choose a suitable field of work and to find employment in jobs they can do. The tests help the students to choose work which will make full use of their potential abilities.

Workers for Overseas Openings

THE USES and affiliated State agencies have been requested by the Department of the Army to give all-out assistance in recruiting workers for Overseas Affairs Branch openings. In Japan, Korea, Okinawa, and Europe many of the uniformed personnel have been assigned to combat units, with the result that the number of openings for civilian workers has been greatly increased. The civilian workers must be obtained from the States, since the Armed Forces have absorbed about all of the available overseas work force.

The Employment Service has given assistance continuously for several years to the Overseas Affairs Branch recruiting program.

Details of steps to give further impetus to the program are contained in ES Program Letter No. 297 which has been sent to all State agencies.

Employment Security Activities at a Glance, April 1951
United States and Territories

	Number or amount	Percentage change from previous month
Overall		
Initial claims	[1] 919, 200	+33
Weeks of unemployment covered by continued claims	3, 913, 300	−2
Weeks compensated	3, 108, 800	−12
Weekly average beneficiaries	740, 200	−8
Benefits paid	$62, 294, 400	−13
Funds available as of Apr. 30, 1951	[2] $7, 122, 342, 200	+1
Visits to local offices	8, 911, 200	+2
New applications	594, 600	+12
Referrals:		
Agricultural	140, 200	+68
Nonagricultural	987, 800	+8
Placements:		
Agricultural	108, 200	+62
Nonagricultural, total	551, 600	+8
Men	356, 600	+12
Women	195, 000	+1
Handicapped	24, 900	+8
Counseling interviews	126, 800	+9
Individuals given tests	85, 100	+17
Employer visits	217, 500	+5
Veterans		
New applications	96, 800	−1
Referrals, nonagricultural	243, 500	+8
Placements, nonagricultural	135, 900	+8
Placements, handicapped	11, 300	+5
Counseling interviews	22, 800	−6

[1] *Excludes transitional claims which do not represent new unemployment.*
[2] *Funds available as of Mar. 31, 1951, for Pennsylvania and South Dakota.*

Solvency of Funds and Benefit Financing

Financial Experience in Unemployment Insurance During the Postwar Period, 1946-1950

By WILLIAM H. WANDEL
Chief, Division of Program Standards, Bureau of Employment Security

THE period of five calendar years which has elapsed since the end of World War II, though brief, encompasses such variations in experience as to suggest that it may be representative of experience during much longer periods. Within this span we had in 1946 heavy disbursements for reconversion unemployment, 2 years of very high employment in 1947 and 1948, a period of marked recession throughout 1949 and the early months of 1950, and a strong recovery for the remainder of that year. Total reserves at the end of the period were almost identical in amount to those at the beginning: $6,914,000 at the end of 1945, $6,972,000 at the end of 1950. Of course, higher taxable payrolls in the latter year meant a lower ratio of reserves to taxable wages.

If this period is indeed typical, to a substantial degree, of the variety of experience to which the unemployment insurance program is subject, it is important to analyze it for the lessons it may teach.

In this necessarily brief review, the cost and contribution experience throughout the period will be looked at as a whole, the experience of any one year being important only as a part of the complete experience of this short cycle.

Cost

For the 5-year period, the cost of unemployment compensation benefits for the Nation as a whole was 1.55 percent of taxable wages, but in individual States the cost was as low as 0.4 percent, in Texas, and as high as 3.2 percent, in Rhode Island. The vast majority of the States (38) had average rates below the national average, 22 of them with rates of less than 1 percent. Only 7 had an average greater than 2 percent and only two went above 2.5 percent.

It is clear that the rate of benefit expenditure varies from State to State primarily because of differences in the economic characteristics among the States; the extent of unemployment is a reflection of the economic structure of the State. The low-cost States are those with relatively low proportions of the work force in nonagricultural employment, e g., Colorado, Iowa, Nebraska, New Mexico, and South Dakota. On the other hand, the high-cost States are those either most highly industrialized or in which the working population is most mobile: Calfornia, Massachusetts, New Jersey, New York, Rhode Island, and Washington. Thorough analysis of the industrial structure of these States would be warranted but even without it the generalization is valid that it is industrial structure, rather than the benefit formula, that is the principal determinant of cost differentials between States.

Contributions

In the period 1946–50, the rate of contributions, at 1.4 percent of taxable wages, was slightly less than that of benefits. The range among the States was not as wide as in cost rates but still was very substantial: from 0.6 percent in the District of Columbia to 2.4 percent in Washington. The rather close balance between benefit costs and contributions, nationally, over this period was also to be found in about 20 States. However, in the majority of States there is considerable disparity to be found between the rate of contributions and the rate of benefit costs. For example, Massachusetts, with costs averaging 2.2 percent of taxable wages, had an average employer tax rate of only 1.3 percent. On the other hand, New Mexico, with a cost rate equal to 0.5 percent, collected 1.9 percent. In a number of States tax collections were more than double benefit costs: Colorado, Idaho, Iowa, New Mexico, South Dakota, and Texas. On the other hand, California, Massachusetts, and Rhode Island had average tax rates considerably lower than their cost rates.

Here, too, further analysis would be rewarding.

Presumably the causes of these disparities may be found in the type of experience rating, or in its operation, or in special legislative enactments which in turn have interesting motivations.

Reserves

Aggregate dollar reserves in the United States were almost the same amount at the end of this period as at the beginning. However, changes in the reserve funds of individual States were more significant. In absolute terms, reserves dropped in 13 States, in one as much as 68 percent and in another more than 56 percent. At the other end of the scale, among the 38 States in which reserves were higher at the end of the period, one State had much more than doubled its reserve and nine others had increased their reserves by more than 50 percent. When reserves are expressed in terms of taxable payrolls, however, in only one State was the ratio higher at the end of 1950 than it was at the end of 1945.

At the end of 1950, while the ratio of total reserves to total 1950 payrolls was 8.6 percent, in one State the comparable ratio was 2.7 percent, while in another it was 13.6 percent. Eight States had reserve ratios of less than 7.5 percent, 18 with more than 10 percent.

Can it be said that these reserve ratios reflect the need for reserves? How can the needed size of reserves be determined? It seems fairly obvious that the amount of reserve needed to protect any insurance system depends on the level of costs expected over a reasonably foreseeable period. A direct relation should exist between the reserves and such expected cost. Only with such a relationship will there be reasonable assurance that the reserves will be adequate to supplement current revenue in order to meet benefit paymens during high-cost years—thus avoiding sharp tax-rate increases at such times—and to provide reasonably against unforeseeable contingencies. In these terms it is plain that a State which is demonstrably low-cost, because of its economic and industrial structure, needs a smaller reserve ratio for safety than does a demonstrably high-cost State.

Relationship to Costs

State reserve funds today, by and large, appear to have no rational relationship to costs, if those costs are measured by the 1946–50 experience. States with low costs have high reserves; States with high costs have low reserves. Reserves of several States, equally large in terms of percentage of the States' taxable wages, have widely varying significance. For example, Colorado, Iowa, and Washington have substantially the same reserve percentages (11.5–11.8). However, average cost rates in Colorado and Iowa amounted to 0.5 percent of taxable wages, while in Washington the average cost rate was 2.5 percent. Obviously the reserve needs of these States differ greatly; Washington's reserve of 11.7 percent is equal to only 4.7 times its average cost rate, while similar reserves in Colorado and Iowa are equal to 23.0 and 23.6 times their respective cost rates. Arkansas, California, and the District of Columbia had similar reserve percentages. California's 8.4 percent of taxable wages was only 3 times its average annual 1946–50 cost rate; Arkansas, with an 8.5 percent reserve, had 6.5 times its average cost rate; the District of Columbia, on the other hand, with a reserve percentage of 8.6 percent, had 14.3 times its average annual cost rate.

Reserves Generally Ample

On the bases of the data presented here, it can be said that in the majority of States the reserves tend to be more than ample rather than not enough. While many factors may enter into an explanation of this chief among them would probably be that, for many States and areas, the cost of unemployment insurance has always been overestimated and that the level of benefit payments during World War II was so low that substantial accumulation of funds was practically unavoidable, while experience since the War has not, on balance, changed the level of the funds appreciably. Thus the over-all financial problem cannot be said to be necessarily that of solvency, but is rather that of a lack of balance or of a rational relationship between costs, contributions, and reserves which, if not corrected, will create serious economic problems.

The foregoing description of the relationship of reserves and contributions to benefit costs has relied on benefit-cost experience during a recent past period. However representative this period may be, a truly balanced relationship between contributions, reserves, and costs should be based on reasonably expected costs rather than simply on historical costs. Past experience is seldom duplicated and should not be used, except as a guide, for planning the financing of costs for a future period. In planning the financing of costs over a future period, the period should be carefully chosen. It should be short enough to permit accuracy with respect to the projection of economic conditions and yet it should be long enough to make it possible to finance the system by raising the same amount of revenue during periods of both high and low economic activity, by estimating the average annual revenue needed to meet costs over the entire period, after allowances had been made for reserve funds on hand. The choice of the period over which costs are to be financed and the projection of the economic conditions most likely to occur during the carefully chosen period can only result from a comprehensive study of the industrial and economic structure of the State, benefit-claimant characteristics, and other factors which affect costs. Such a study should also include changes which may reasonably be expected in benefit rights provided by the law and in the coverage of the program.

States are moving ahead to make such studies, both of past experience and future prospects. Thus the first fundamental steps are being taken to achieve balance in the financial structure of the unemployment insurance program.

Photos courtesy West Coast Lumbermen's Association.

An old growth mixed forest (chiefly Douglas fir) located in southern Oregon on Grants Pass-Crescent City highway.

The Lumber Industry in Oregon and Its Effect Upon Unemployment Insurance Benefits Costs

By **SILAS GAISER**

Administrator, Oregon State Unemployment Compensation Commission

AN ANALYSIS of Oregon's economy, with reference to financing the Unemployment Compensation program, focuses special attention on the development of the lumber and wood-products industry. With barely 1 percent of the Nation's labor force, Oregon has well over 10 percent of the lumber workers—many more than any other State. Approximately a quarter of Oregon's covered payrolls are reported by this main industry while many other groups, particularly construction, paper and furniture, are closely allied with wood production.

Resource base of this industry rests not only upon heavy stands of virgin and second growth timber widely scattered over the State, but also upon the recent development of highly integrated plants and experienced personnel turning out a variety of wood products. Two types of forest predominate, namely mixed stands of Douglas fir, hemlock, cedar and spruce west of the Cascades, and pine, mainly ponderosa, east of this great mountain range. Although only 34 percent of the unreserved forest land is under private ownership, control of large blocks is closely maintained by large operators with the aid of accessory roads, well-equipped plants, conservation programs, and other devices.

While many "gyppo" loggers and small mills operate, especially during flush periods, the trend toward unified ownership and management has been noticeable in recent years. Nearly five-sixths of the 79,400 average employment in 1950 was reported by

A truck on its way to the reload. Note timber stand in background.

logging operators, sawmills and planing mills, but plywood, wooden containers and mill work is becoming a more important part of the industry and, it is hoped, will provide work for many dropped from the woods end as the sources of raw material dwindle. With about 3,000 covered firms in this group, exact breakdown of the various groups was impossible because of overlapping operations.

An interesting postwar statistic shows 53.2 percent of the industry's employing units in early 1951 without the requisite 4-year experience for tax rate reduction. Most of the permanent low-rate concerns operate throughout the winter, as was shown by the industry's 1950 average contribution rate of 1.34 percent for the first quarter, rising to 1.74 percent in the third quarter when woods and mills were busy to the last man.

Because volume of construction all over the country largely determines demand for lumber and its by-products, the industry has been almost entirely on the uptrend since payments to the unemployed were started by the Oregon Commission 13½ years ago. Restrictions held wartime operations close to 1938–41 levels, but the postwar housing and business expansion nearly doubled the number of jobs. Although this basic Oregon industry has yet to experience a real decline since the unemployment compensation program began, considerable temporary contraction has taken place (in 1938, 1946, and 1949 for example) and a seasonal let-down occurs almost every winter affecting all phases of Oregon business. Whether this swing is due more to market conditions than to the cold and wet weather is a moot question, but it is known that covered employment varied as much as 98,000 in 7 months (January to August 1950), of which 57,800, or 59 percent was in lumber and construction. The actual employment index between 1936 and 1949 showed variations from 88.0 to 110.1 between these same periods of the year.

From an actuarial viewpoint, "seasonality" of the industry undoubtedly presents the greatest immediate problem. Because woods workers are better paid than most groups, they become eligible for high weekly payments and for longer annual durations. (Oregon's benefit schedule is based entirely upon base year earnings.) Last year, for instance, benefits were being paid to lumber and logging employees at the rate of 9.2 percent of taxable wages in January, 12.1 percent in February, 7.7 percent in March, and only 0.4 percent in August, September and October. Even in moderate 1948, the rate varied from 5.9 percent in January to 0.3 percent in the summer months.

Scarcely had the Commission opened its doors to the unemployed in January 1938 before the seasonal nature of the industry and its adjuncts were felt. Nearly half of the first year's 96,741 claimants were from lumber and construction while most others were from closely related logging industries. "Off-seasons" were declared for almost 500 logging and lumber operators and several hundred other firms whose payrolls were reduced in certain months. This limitation on benefits for employees of these "seasonal" concerns resulted in court action and changes in the law by the 1941 legislature. Under new definitions, still substantially unchanged, "seasonal determinations" affected only 102 lumbering firms, mostly high level operators, in 1942, and dwindled to around a dozen after the war.

With the seasonality of the demand for wood

Douglas fir region western Oregon. Loading with spar tree and heel boom.

products closely linked up with weather conditions, large operators have tried to maintain a continuous flow of products from forest to ultimate consumer. Wintertime stock piling of logs and lumber is increasing, but large capital expenditures and uncertain price movements have tended to restrict the practice.

Weather conditions have proved a more potent factor in temporary shut-downs and, when combined with market drops, have had a disastrous effect, particularly in logging and smaller mills. Location of many of the remaining stands of timber at the higher and more remote areas has restricted much basic woods activity to summer months. Not only is it difficult to fall and trim trees during the damp months but it is almost impossible to move the logs to the mills, usually at lower, more convenient elevations. Even the efficient semitrailer trucks built especially for heavy lumbering are unable to navigate when winter rains and alternate freezing and thawing soften the roads. In the eastern part of the State, however, where pine is harvested, lower temperatures and lighter snowfall actually help logging and trucking.

Transportation also becomes a problem in getting finished products to markets, though tie-ups in rail and water carriers usually are temporary and are not "regularly recurring." Wartime and postwar shortages in freight cars often cause mill shut-downs even when weather and market conditions are perfect. The longshoremen's strike in 1948 brought reductions of more than a third in lumbering jobs for nearly 4 months in the busy Coos Bay area. These slowdowns always are reflected in declines in trade, service and related groups. Particularly is this the case in many "one-industry" towns. Low summertime humidity, bringing fire danger and logging shut-downs, is another temporary unsettling factor, but this usually comes in the busier part of the year.

Skilled and semiskilled workers in the lumber industry usually are required to have a high degree of physical fitness, judgment and muscular coordination. Both the AFL and the CIO have unions covering most woods and mills operations with the result that for unemployment compensation purposes a strike in one sphere of a firm's operations may leave workers in another division eligible for benefits—if they are not participating in, financing or directly interested in the labor dispute. In 1945–46 a 4-months labor dispute had minor effect because most lumber workers were not eligible for benefits.

Although the Commission has not yet had to meet a general shut-down of this basic industry, available figures show that periods of high unemployment generally find "lumber and logging" with the highest separation rate or drawing a disproportionate part of the benefits. In 1938, when payments almost equaled contributions, lumber and construction accounted for nearly 3 of the 6 millions in benefits. These two seasonal groups also received nearly half of the record $12,579,263 paid out in the first quarter of 1950, while in other years their part of the total was more nearly in line with their proportion of covered employment—usually about a quarter.

Heavy caterpillar tractors like this haul logs from woods to loading landing.

In the 1949–50 benefit year, the lumber industry was responsible for 39.8 percent of the eligible claimants, although it reported only 24.9 percent of the covered workers in the base year. Lumber workers had an 8.3 percent separation ratio rate per 4-week period (exceeded only by construction) as against an all-industry average of 5.4 percent. Of lumber workers eligible for compensation under Oregon law, 48.6 percent filed claims, comparing with an over-all average of 32.8 percent. Canning and preserving, and construction had higher rates, but their combined claims load was barely half of the wood-products total. Because of long potential duration resulting from high earnings and because the unprecedented cold lasted only until mid-February, lumber workers actually drew only 47 percent of their possible benefits as compared with an all-industry average of 53.7 percent.

With high lumber prices prevailing during most of 1948 and 1950, a striking contrast in benefit ratios is noted. Due to the severity of the latter winter, the ratio of compensation paid to lumber workers to their taxable payrolls held up to 3.29 percent, almost as high as during 1949 when both weather and markets caused prolonged lay-offs, and much higher than the 0.89 percent in 1948. Total payments to lumber and logging employees last year surpassed even 1949, when summer and fall unemployment broke postwar records.

How closely the general trend of contributions, payments, and trust-fund balances is tied up with the well-being of the lumber industry is shown in an analysis of the accompanying table. Although covered wages in the wood-products industry comprise less than a quarter of the total payrolls subject to the unemployment law (and a much smaller proportion of the entire State's income, which, of course, includes argiculture, public employment,

Taxable payrolls and average contribution rates paid to Oregon Unemployment Compensation Commission—1938–51

	Taxable pay rolls		Average tax rates (percent)		Lumbering and logging	
	All firms	Lumbering and logging	All firms	Lumbering and logging	Contributions paid	Benefit payments
Total	$7, 567, 737, 311	$1, 741, 325, 574			$35, 516, 506	$23, 929, 097
1938	234, 625, 633	45, 490, 243	2. 7	2. 7	1, 228, 237	2, 378, 467
1939	245, 713, 271	54, 841, 040	2. 7	2. 7	1, 480, 707	978, 378
1940	246, 042, 785	59, 578, 296	2. 7	2. 7	1, 608, 614	1, 514, 752
1941	338, 517, 681	85, 685, 979	2. 65	2. 758	2, 363, 377	782, 978
1942	546, 094, 619	106, 691, 688	2. 409	2. 548	2, 718, 624	538, 656
1943	723, 558, 940	121, 144, 177	2. 314	2. 470	2, 992, 156	90, 715
1944	722, 699, 562	123, 902, 943	2. 234	2. 259	2, 798, 944	33, 391
1945	648, 672, 079	106, 613, 256	1. 983	2. 033	2, 167, 174	248, 391
1946	641, 687, 697	141, 283, 098	1. 726	1. 836	2, 593, 527	1, 542, 629
1947	754, 235, 672	202, 360, 012	1. 810	1. 896	3, 782, 494	1, 100, 021
1948	821, 764, 451	232, 296, 957	1. 699	1. 788	4, 153, 890	1, 838, 283
1949	790, 124, 921	206, 437, 885	1. 71	1. 742	3, 595, 262	6, 088, 786
1950 [1]	854, 000, 000	255, 000, 000	1. 38	1. 57	4, 033, 500	6, 793, 650

[1] Estimated.

and many small firms and others), its ups and downs closely parallel those for the entire economy and in most cases actually are the basic cause for changes.

Trust-fund balances have remained between $70 and $86 million since the end of the war, but the constant lowering of tax rates and increases in the benefit schedule by legislative action have resulted in a trend that may reduce reserves to the point where reexamination of the relationship of taxable payrolls and benefit payments becomes necessary. Despite the secondary impact of defense contracts and stepped-up production of civilian goods in the past year, the fund has increased but little. Payments for the first half of 1951 just about balanced contributions. With taxes due to drop close to a 1-percent average in 1952 and higher benefits in effect in July 1951, even the increased defense program may not check the outflow of reserves.

Although the accompanying table shows that contributions of lumber firms have exceeded payments to their employees in 10 out of 13 years, authorities consider it significant that the last 2 years have shown a net deficit for the industry of more than $5 million. In fact if the 5 wartime years when lumber took second place to shipbuilding in the State's economy are removed from the table, contributions and payments within this main industry almost exactly balance each other at just over $22 millions—and this during two periods when lumber producers were enjoying by far the best markets in their entire history. An actuarial study reexamining Oregon's entire unemployment experience rate structure now is under way—and attention to some of the seasonal and cyclical trends noted in the State's basic industry may help in arriving at definite conclusions to guide future legislative and administrative policies.

UI CHUCKLE

AN OREGON employer, asked by the agency to fill out a questionnaire on the eligibility for benefits of a claimant (transient logger) in the Logging Industry, replied as follows:

In connection with your questions concerning ..... and the conditions and reasons for which he was discharged, I herewith make the following statements:

1. Mr. ..... represented himself to me upon being hired, that
a. He was a cracker jack "Cat Skinner."
b. He could run any piece of equipment.
c. He was an ace donkey puncher.
d. They called him "Cold-deck Raz" over in Washington.
e. He was the man who invented logging.
f. He could run any dirt-moving machine made.
g. He could show me how to really gather in the money.
h. He was the fellow who was responsible for Weyerhaeuser's success in the timber industry. I already had a fellow hired who I was sure did more for Weyerhaeuser than had Mr. ..... and what's more he had also told me so.
i. And last, but not least, he was a hot shot.
2. After going to work, Mr. ..... did the following things:
a. Knocked himself on the head with one of the donkey levers in a manner I am sure no one else could excel.
b. Spilled a quarter barrel of grease on the ground.
c. Killed the motor on the donkey every time he made a pull.
d. Dropped me out of a tree too fast and then stepped on brake bringing me to a sudden stop and all but ruined me.
e. Pulled the butt rigging through the high lead block.
f. Monopolized the conversation during dinner hour telling his big lies so much so that I never got a chance to tell any of my own. I've almost forgotten the last straw, now I remember, it was item "d" I believe.

Very truly yours,

P. S. Mr. ..... was fired and paid in full April 21, 1949. If Mr. ..... is looking for recommendation, please refer him to me.

Benefit Experience, New York State, 1938-50

Implications for Benefit Financing

By **NATHAN MORRISON**

Principal Actuary

Division of Placement and Unemployment Insurance

New York State Department of Labor

IN THE first 13 years of operation, from January 1938 through December 1950, unemployment insurance payments in New York State totaled $1,694,000,000, or an average of $130,000,000 a year.

The range of experience has been great. During World War II, benefits in 1 year were as low as $10,500,000. The highest amount in any one benefit year was $370,000,000.

The benefit experience in New York State has been carefully recorded each year. Data are available by industry on the amount of benefits, number of beneficiaries, number of compensated weeks, as well as employment, taxable payrolls, and contributions.

What does this experience reveal in connection with the long-range costs of benefits in New York? A comprehensive analysis of these data is now under way as part of a solvency study being carried out by the New York agency with the cooperation of the Bureau of Employment Security. This detailed study will be completed in a few months.

In this brief article, some of the broad aspects of the 13 years of experience will be considered in relation to the problem of financing benefits.

Long-range Estimating Difficult

It should be noted that estimating long-range unemployment benefit costs is a particularly difficult problem. Many actuaries and students of insurance have questioned whether insurance principles can properly be applied to the risk of unemployment. A well-known actuary, J. D. Craig of the Metropolitan Life Insurance Co., wrote in 1934:

> In insurance against death, sickness, and old age, the actuary deals with contingencies which are generally not man-made, but which occur with a certain natural inevitableness. With unemployment, the story is different. Unemployment rests to an enormous degree upon what man does or fails to do in fields of science, economics, and sociology. To predict the outcome of man's creativeness in these three fields is impossible. Furthermore, to assign permanency to any of the causes of unemployment is to wander aimlessly in a rapidly changing society, for any known cause may quickly fade out and an entirely new, unsuspected source of unemployment may take its place.

In 1951, international events represent another major element that must be taken into account.

Recognizing all these difficulties and limitations, there are some positive and helpful factors. The data on employment and unemployment that have been collected since 1938 give a far more adequate basis for studying the risk of unemployment than anything available before the beginning of the unemployment insurance program.

Some of the facts revealed by actual experience have been surprising and occasionally contrary to so-called "common sense" ideas concerning the interrelationship of employment and unemployment.

To digress for a moment, a simple experiment will show that a pint of water mixed with a pint of alcohol will not produce two pints of the mixture, but an amount somewhat less than two pints. (Some persons will think the punishment fits the crime.) The scientific explanation is that the different-sized molecules of water and alcohol intermingle just as tiny grains of sand can be poured into a jar filled with marbles.

Similarly, experience has shown that contrary to "common sense," employment levels and unemployment levels can both rise simultaneously. One example of this occurred in New York in 1940 when, each month, both employment and unemployment were higher than in the corresponding month of 1939. Detailed study of this apparent anomaly in individual textile firms in one city revealed that there was a high degree of attachment to each firm, and in fact that there was a "gentlemen's agreement" not to pirate workers. Thus one firm was expanding by hiring the wives or sisters of its workers while another firm was laying off some of its workers.

This was an unusual example. More typical was the case where iron and steel workers were being hired in Buffalo, while many sewing machine operators were laid off 400 miles away in New York City.

Experience has also revealed more about the kinds of unemployment that are dealt with by the unemployment insurance system. The old idea of unemployment was based on the depression years, 1929–33, when many persons were idle for months and even years. Actual operations show that claims arise from

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both temporary and permanent lay-offs. Labor turn-over in our complex economy occurs daily in good times as well as bad. Normal business operations produce an irreducible minimum of unemployment. A plant burns; storms delay the receipt of materials; packaged materials fail to meet specifications; power is interrupted; and there are seasonal and inventory lay-offs. To these must be added the layer of unemployment resulting occasionally from Nation-wide business conditions, such as the transition period after VJ-Day and the shrinkage in manufacturing jobs during the first half of 1949.

The 13 years of detailed data on the industrial composition of employment and unemployment in New York State include the prewar years 1938, 1939, and 1940 when the country was emerging from the great depression, the war years, 1941–45, and the postwar period 1946–50.

Formula Has Changed

The New York benefit formula has changed considerably during this period and it is important to note these changes before considering the implications of the employment and unemployment experience. In 1939, the New York law provided for a weekly benefit scale from $7 to $15, 13 weeks uniform duration, and a 3-week waiting period, with no partial unemployment payments. By 1945, the uniform duration was extended to 26 weeks, the waiting period was 1 week, the weekly benefit scale was from $10 to $21, and partial unemployment was compensated under a "day-base" plan. In 1948, the maximum weekly benefit rate was raised to $26. (Effective in 1952, the maximum weekly benefit rate will be $30.)

In this article, it will be possible to examine briefly only the major industry divisions in New York State, and it should be realized that these broad groupings unavoidably conceal important details.

New York has a complex and varied economy. Practically every type of industrial activity can be found in the State. Employment data, available since 1937, show that *manufacturing* employment has ranged from an average of 1,172,000 in 1938 to a peak of 2,113,000 in the war year 1943. In 1938, manufacturing accounted for 39.2 percent of all covered employment; in 1943, it accounted for 53 percent of all employment. Throughout the period from 1937 to 1950, about 45 percent of all employment was in manufacturing. The present defense program should produce an increase in manufacturing employment during the next few years.

Apparel manufacturing is the largest industrial division in the State, accounting for about 10 percent of all covered employment each year. This group includes men's and boys' clothing, women's and children's coats, suits, and dresses (about three-fourths of the country's women's apparel is produced in New York City), millinery, furs, and underwear. Employment in this industry has ranged from an average of 289,000, or 9.7 percent of all employment in 1938, to a peak of 411,000, or 10.1 percent of the State total in 1946. Unemployment benefit payments to apparel workers have averaged close to 20 percent of all payments during the 13 years since 1938. The range has been from a low of 8.1 percent of all benefits in the first postwar benefit year, 1945–46, to a high of 25.6 percent of total benefits during the 1942–43 benefit year. Unemployment in this industry, as measured by the ratio of compensated weeks of unemployment to man-weeks of work,[1] has varied from a low of 0.7 percent during the 1944–45 year to a peak of 11.2 percent in 1948–49. Another measure of unemployment, the annual ratio of benefit payments to taxable payrolls, shows a low of 0.35 percent in 1944–45 and a peak of 7.4 percent in 1949–50. Experience shows that this has been a high benefit cost industry considerably exceeding 2.7 percent each year except during the war period. The general high level of employment which may be expected because of the defense program should result in reduced, but still significant, benefit costs in this industry during the next few years.

Metals and machinery manufacturing includes iron and steel products, nonferrous metal products, electrical and nonelectrical machinery and transportation equipment. Employment in this group has ranged from an average of 226,000, or 7.6 percent of all covered employment, in 1938, to a peak of 815,000, or 20.5 percent of total employment, in 1943. Benefit payments to unemployed workers from this group were only 4.5 percent of all benefits in 1942–43, but rose to 52.3 percent of total benefits in the first postwar year 1945–46, and 31 percent of benefits in the second postwar year 1946–47. The ratio of compensated weeks to man-weeks of work was only 0.1 percent in 1943–44, but rose to 9 percent in 1945–46. The annual ratio of benefits to taxable payrolls almost reached zero (0.04 percent) in 1943–44, but rose to 3.7 percent in 1945–46, and 3.3 percent in 1946–47. This volatile industry may be expected to expand sharply in employment as a result of the current defense program, but will also contract sharply when the defense program levels off. It is also subject to considerable variation from year to year as was evident in 1948–49 and 1949–50 when the benefit cost ratios were 2.32 percent and 3.53 percent, respectively. For the 5 postwar benefit years, 1945–46 through 1949–50, the ratio of benefits to taxable payrolls in this industry division was 2.9 percent.

Other manufacturing includes food products, printing and publishing, paper, leather products, lumber and furniture, chemical products, textile products, etc. Within the food products industry alone are beverages, candy, meat, dairy, canning, sugar refining, bread and grain. Thus, this industry division is a broad grouping, justified only by the need for broad summary treatment in this brief survey. This group has averaged about 22 percent of the State's covered employment, ranging from 657,000 workers, or 22 percent

[1] *Man-weeks of work can be estimated as follows: Employment for the week ending nearest the 15th of each month is reported by all covered employers. The average of the 12 weeks reported can be used as the estimate of employment in the average week of the year, and multiplied by 52 to produce the total man-weeks of work during the year.*

of the total in 1938, to 943,000, or 23 percent of the total in 1946. Payments to unemployed workers in this group have varied from 13.3 percent of total benefits in 1943–44, to 28.4 percent of benefits in 1947–48. The ratio of compensated weeks to man-weeks of work shows a low of 0.2 percent in both 1943–44 and 1944–45, and a high of 6 percent in 1948–49. The annual ratio of benefits to taxable payrolls varies from 0.08 percent in 1944–45 to 3.65 percent in 1949–50. This ratio, for the 5 postwar years 1945–46 to 1949–50, was 2.6 percent. During the next few years this industry division should have moderate to low benefit costs.

Construction has provided employment for about 4 percent of the covered workers in the State. The range has been from 87,000, or 2.2 percent of covered employment in 1944, when wartime restrictions limited construction activity, to 195,000, or 4.5 percent in 1948. Benefits have varied from 2.9 percent of total State payments in 1945–46 to 18.9 percent of total payments in 1943–44 when construction activity was restricted, and unemployment in other industries was extremely low. The ratio of weeks compensated to man-weeks of work shows a low of 1 percent in 1944–45 and a high of 12 percent in 1940–41. The annual benefit cost ratio has been high, the long-range cost exceeding 2.7 percent. The low point was a benefit ratio of 0.37 percent in 1944–45, while the high ratio was 4.86 percent in 1949–50. This industry, because of the nature of its operations, may be expected to continue to be a high benefit cost industry.

Transportation, communication, and utilities is another conglomerate group which includes stevedoring, water transportation, buses, taxicabs, as well as the public utilities. Employment in this group has ranged from 263,000, or 6.9 percent of total employment in 1942, to 404,000, or 9.2 percent in 1948. Benefits have varied from 2.5 percent of total payments in 1944–45 to about 7 percent of payment in 1949–50. The ratio of weeks compensated to man-weeks of work shows a low of 0.1 percent in the 2 war years 1943–44 and 1944–45, and a high of only 3.4 percent in 1949–50. The annual ratio of benefits to taxable payrolls has been low, averaging only 1.1 percent for the entire period since 1938. The high year was 1949–50 when the benefit cost was 2.4 percent. The 5 postwar benefit years show an average cost of 1.5 percent. This industry group should continue to show relatively low benefit costs in the next few years.

Trade includes all of retail and wholesale trade as well as eating and drinking places. This group provides employment for about one-quarter of all covered workers. The range has been from 682,000, or 22.8 percent of the total in 1937, to 1,095,000, or 25.1 percent, in 1948. Benefits have varied from 8 percent of the State total in 1945–46 to 21.5 percent in 1939–40. The ratio of weeks compensated to man-weeks of work has been lower than the State-wide average, ranging from a low of 0.2 percent in 1944–45 to a high of 4.4 percent in 1940–41. The benefit cost ratio has also been low, averaging 1.3 percent since 1938, and reaching a peak of 2.4 percent in 1949–50. The postwar experience shows an average annual benefit cost of 1.6 percent. This industry group should experience moderate to low benefit costs during the next few years.

Finance, insurance, and real estate is the most stable industrial group in the State. Employment has varied from 280,000, or 9 percent of the State total in 1939, to 330,000, or 7.5 percent in 1948. Benefits have ranged from 1.9 percent of the State total in 1945–46 to 5.8 percent in 1941–42. The ratio of compensated weeks to man-weeks of work has been extremely low, varying from 0.1 percent in 1944–45 and 1945–46 to 2.7 percent in 1940–41. The annual benefit cost ratio has averaged 0.8 percent since 1938, and 1.0 percent since 1945, with a peak year cost ratio of 1.6 percent in 1949–50. This should continue to be a low benefit cost industry.

Service includes business, personal and professional service as well as amusement and recreation, hotels, and domestic service. This group has provided employment for about one-tenth of the State's workers, ranging from 326,000, or 10.9 percent of the State's total in 1937, to 463,000, or 10.6 percent in 1948. Benefits have varied from 6.1 percent of the total in 1945–46 to 12.7 percent in 1943–44. The weeks compensated ratio has been relatively low, from 0.4 percent in 1944–45 to 4.7 percent in 1940–41. The annual benefit cost ratio has been moderate, exceeding 2.7 percent only in 1949–50 when it rose to 3.18 percent. Since 1938, the benefit cost has averaged 1.8 percent. Since 1945, the cost has been 2.2 percent. This should continue to be a moderate benefit cost industry.

More detailed analyses of the benefit experience, as well as careful consideration of the employment and unemployment patterns (which are now being closely studied in New York State), should produce a clearer picture of the probable range of unemployment insurance benefit costs in the next few years. It will be necessary to make various assumptions as to the likely course of international and national events. Within the limits of these assumptions, however, reasonably accurate cost estimates can be prepared, utilizing the relationships revealed by the detailed record of 13 years of experience.

Needed: 63,000 Nurses

"One of every ten girls graduating from high school must be recruited as a nurse if the Nation's needs are to be met," said Miss Ruth Freeman at the biennial conference of State Directors of Public Health Nursing, the Public Health Service and the Children's Bureau.

"The country should have 63,000 more nurses now—with another 35,000 by 1960 to meet the increased demand and to take care of the expanding population."

Miss Freeman said it is not realistic to count on the 205,000 inactive nurses to fill unmet needs; of the total now inactive, 87 percent are married, 57 percent have dependents under the age of 18, and 10.6 percent are over 50 years old.

Miss Freeman is a technical advisor of the Commission on Chronic Illness in New York, a nursing consultant with the National Security Resources Board and head of public health nursing at Johns Hopkins University.

View of a typical line-up of claimants filing continued claims at the Phoenix, Ariz., local office.

Sectional counters in Phoenix local office.

DEPENDENTS' ALLOWANCES

—How Much Do They Cost in Arizona?

By **EARL A. HEISE**
Research and Reports Analyst
Employment Security Commission of Arizona

WHEN Pedro Garcia sits down to his supper of tortillas and beans, watching his nine children eat every bit of food in sight, he isn't concerned with social theories or the problems of unemployment insurance. Since he lost his job, he is worried about supplying his family with enough food, and with paying the rent until he finds new work. Of course, his unemployment insurance checks are helping to tide him over, and he's thankful for that; with an additional $6 in dependents' allowances each week, it sometimes means the difference between going hungry until the next check arrives, or having at least a little food in the house. But it is precisely at this point when the theory "that persons having family responsibilities should benefit to a higher degree" no longer remains theory. It becomes a real thing.

Recognizing a need for increasing benefits for those workers who have dependents, Arizona's legislators incorporated dependents' allowance provisions in the State unemployment insurance law. These provisions became effective July 1, 1949, and since that time, through March 31, 1951, Arizona paid over half a million dollars in dependents' allowances alone. This amount, which was 18.1 percent of total benefit disbursements, was distributed among 16,103 claimants with dependents. Actually, the cost was small, considering the advantages of increased benefits to workers, which, in turn, helped to strengthen purchasing power in communities throughout the State.

When an Arizona worker becomes unemployed, his unemployment insurance check may be increased $2 for each dependent, not to exceed $6 in dependents' allowances. A dependent can be an unmarried child (including stepchild and adopted child) who is under 18 years of age; parents; stepparents; and parents-in-law. The number of dependents is established at the time the first claim is filed, and it may not be changed during the benefit year.

What is our experience with dependents' allowances? What claimant characteristics are most noticeable? What are the costs? These questions are always in the limelight, and answering them required a detailed study of all claimants since the dependents' allowances program went into effect.

Characteristics of Claimants With Dependents

Our first study covered all persons (29,615) who filed claims for unemployment insurance in Arizona

between July 1, 1949 (when dependents' allowances began) through June 30, 1950, to include the first full year. The total of 29,615 persons was comprised of 23,215 eligible claimants plus 6,400 who filed but were not qualified for benefits. Among the eligible claimants, 16,882 persons claimed dependents. This was 72.7 percent of all eligible claimants. Among those not eligible, 3,162 persons (49.4 percent) claimed dependents.

All claimants were analyzed first by the number and type of dependents. Further breakdowns were then made of eligible and ineligible claimants.

Nearly 40 percent of persons filing for dependents' allowances claimed the maximum number of three dependents allowable under the law. These claimants totaled 6,542, of which 93 percent were males. Over 70 percent claimed 1 spouse and 2 children as dependents, and about 25 percent claimed 3 children. Significantly enough, well over 90 percent of those filing for 1 spouse and 2 children, or for 3 children, were males, indicating that the husband and father still was the provider of the family.

The next largest group filed for one dependent. Here, 6,035 persons, of whom 75 percent were males, claimed either spouse, child, or parent. Nearly 60 percent claimed a child as a dependent. Claimants filing for two dependents were not as predominant, totaling 4,305 persons, or 25.5 percent of the entire group.

Although a separate analysis was made of the eligible and of the ineligible claimants with dependents, the basic picture remained unchanged. Among the eligible claimants, 4,799 persons claimed one dependent, 3,518 claimed two, and 5,403 claimed three. Here again, the largest group certified to the maixmum number of three dependents. And again, over 85 percent of the eligible claimants with dependents were males.

Of those filing for three dependents, over 70 percent claimed a spouse and two children, and males comprised nearly 95 percent of this group. In the group claiming two dependents, nearly 70 percent indicated one spouse and one child as dependents, and 99 percent of those filing were males. The next most significant entry in this category was the 393 males and 459 females claiming two children as dependents. This is the only instance in which females claimed more dependents than males.

Among the ineligible claimants, 2,497 males, or 78.9 percent of the ineligible group, claimed dependents. Of this group, 40.0 percent claimed the maximum of three. Also, 35.5 percent of the males indicated one dependent, and 24.5 percent indicated two. Among the females who were ineligible for unemployment insurance, 52.2 percent claimed one dependent, 26.5 percent claimed two, and 21.0 percent claimed the maximum of three.

Analysis of both eligible and ineligible persons claiming dependents' allowances, by number and type of dependent

[July 1, 1949, through June 30, 1950]

Number of dependents	Type of dependents	Total	Male	Female
1	1 spouse	3,484	3,264	220
	1 child	1,705	675	1,030
	1 parent	846	598	248
	Total	6,035	4,537	1,498
2	1 spouse and 1 child	2,859	2,811	48
	1 spouse and 1 parent	125	123	2
	1 child and 1 parent	85	48	37
	2 children	1,082	472	610
	2 parents	154	123	31
	Total	4,305	3,577	728
3	3 children	1,714	1,318	396
	1 spouse, 1 child, 1 parent	77	76	1
	1 spouse and 2 children	4,664	4,627	37
	1 spouse and 2 parents	18	17	1
	2 children and 1 parent	53	40	13
	2 parents and 1 child	16	9	7
	Total	6,542	6,087	455
	Grand total	16,882	14,201	2,681

Distribution of married male claimants by age, number of dependents, and educational level

Age	Total	Number of dependents				Educational level			
		0	1	2	3	Elementary	High school	College	None
18 to 24 years	81	7	23	32	19	41	37	1	2
25 to 44 years	609	45	99	124	341	316	236	45	12
45 to 64 years	424	38	175	80	131	285	95	16	28
65 and over	45	2	34	4	5	29	11	1	4
Total	1,159	92	331	240	496	671	379	63	46

Distribution of married female claimants by age, number of dependents, and educational level

Age	Total	Number of dependents				Educational level			
		0	1	2	3	Elementary	High school	College	None
18 to 24 years	79	49	23	6	1	6	65	8	0
25 to 44 years	278	133	51	53	41	73	177	26	2
45 to 64 years	87	51	25	7	4	27	45	14	1
65 and over	1	1	0	0	0	1	0	0	0
Total	445	234	99	66	46	107	287	48	3

Marital Status

For a further analysis of dependency characteristics, an additional study was made on martial status of claimants. This special study was made during one complete week in April 1950, covering all claimants who filed for unemployment insurance during that time. The total number of claimants screened was 2,270. Of this group, 1,159 (or 51 percent) were married men, and 445 (or 20 percent) were married women.

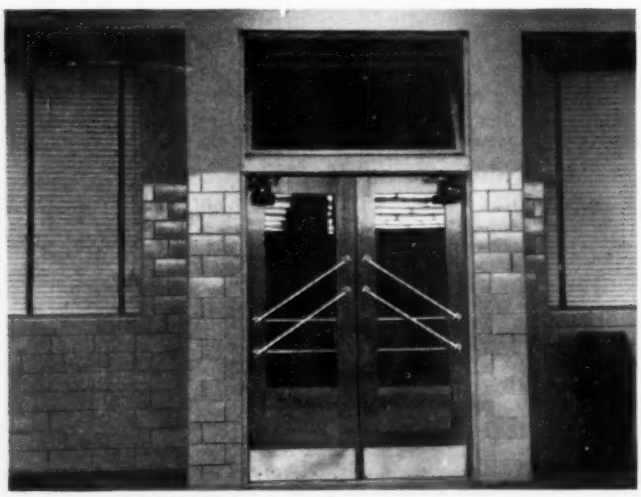
Among the married male claimants, 53 percent of those claiming dependents were in the 25 to 45 age group. Of these, the majority (55 percent) claimed the maximum of three dependents allowable under the law. The next largest group was in the 45 to 65 age group, comprising 37 percent of the total. In this group, approximately 40 percent claimed one dependent, 20 percent claimed two, and 30 percent claimed three. Workers in the age groups of 18 to 25 years, and 65 years and over, claimed very few dependents.

The educational level of these claimants was studied primarily to obtain a better understanding of their possibilities for reemployment. In the final analysis, most of the claimants (nearly 60 percent) had only elementary school to fall back upon in obtaining new employment. Over 50 percent of the claimants in the 25 to 45 age group reported high school education.

The same study was made for married female claimants. Here again, the greatest number of persons filing for unemployment insurance was in the 25 to 45 age group. Most of them claimed no dependents, and the highest educational level fell within the high-school range. Women aged 45 to 65 claimed a negligible number of dependents, and their educational level was predominately in the high school bracket.

The great majority of unmarried male claimants did not claim dependents, and nearly 50 percent reported only an elementary education. Nevertheless, among the unmarried males, 93 claimed one dependent, 39 claimed two, and 28 claimed three. These claimants were largely in the 25 to 44 age bracket.

Among unmarried females, 42 claimed 1 dependent, 24 claimed 2, and 10 claimed three. Here again, the largest number claimed no dependents, and the highest educational level fell within the high-school



One of the four entrances and a view of the lobby in the new $165,000 building which houses the Phoenix local office of the Employment Security Commission of Arizona. Modern in every way, the building has more than 15,000 square feet of floor space.

range, with the 25 to 45 age bracket the most predominant.

Claimants With Dependents Who Exhausted Benefits During This Period

Of the total number of claimants receiving dependents' allowances during the first year of operation, 4,315 persons exhausted benefits. This was 51 percent of the total number of persons who exhausted, and 25.6 percent of all eligible claimants who filed during the period. Of a total of 21,236 first payments during the fiscal year ending June 30, 1950, there were 10,036 beneficiaries, or 47.3 percent, who did not claim dependents, compared with 11,200 persons, or 52.7 percent, who did. Actually, a larger number of persons with dependents started drawing checks than those without dependents. However, a smaller group exhausted, and it may be assumed that persons who claimed dependents' allowances did not exhaust in as great a quantity as all other claimants.

Percentagewise, of exhaustees with dependents, 37.0 percent claimed one dependent, 25.2 percent claimed two, and 37.8 percent claimed three. Claimants with dependents averaged $271.96 per claimant over the 12 weeks' period, and the average weekly check per claimant was $22.66. Dependents' allowances averaged $48.09 per claimant in the aggregate during the 12 weeks' duration, giving an average of two dependents per week claimed.

Cost of Dependents' Allowances in Arizona

During the first year of paying dependents' allowances in Arizona, the cost to our fund was $479,900, or 18.1 percent of the total benefit payments. By March 31 of this year, total cost had increased to $647,868, again 18.1 percent of total benefit disbursements. There were 156,828 weeks of total unemployment compensated for claimants with dependents, resulting in an average weekly benefit amount of $22.75. Without dependents' allowances, the average weekly benefit amount would have been $18.87, or 20.6 percent less.

Arizona paid $3,567,986 in total unemployment insurance benefits during this period. Without dependents' allowances, benefit disbursements would have amounted to only $2,958,612. An increase of 18.1 percent in costs was certainly justified by the additional help to the worker, and by the increased stabilization to the State economy.

Under Arizona's law, dependents' allowances are not charged to an employer's experience rating account. Therefore the entire cost must come out of the pooled fund. However, in spite of increased costs due to dependency, Arizona's unemployment insurance trust fund continued to rise. When dependents' allowances began, the reserves amounted to about $28 million. By March of this year, the fund had increased to about $31 million.

There had been no complaints about the dependents' allowances program, primarily because everyone profits. Arizona employers have no grivance, since the costs do not affect their accounts. The claimants, of course, benefit directly. At the same time, more money is circulated in the various communities to multiply purchasing power.

Coming Themes

August: Problems and Developments of Manpower Mobilization

September: Mobilizing the Handicapped (NEPH Week Issue)

Pennsylvania—a Keystone Economy

By JOHN F. ADAMS, *Director, Bureau of Economic and Business Research, Temple University*
and
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Pennsylvania Bureau of Employment and Unemployment Compensation

PENNSYLVANIA is aptly called the Keystone State. Research into its economy clearly indicates that its activities condition developments in the national economy. Moreover, its trends tend to anticipate those in the Nation as a whole as a result of its industrial and economic structure. Among the most important manufacturing States in the Nation, its economy and the principal factors giving rise to its growth or decline may be taken as significant harbingers of new developments within the economic whole.

A study of the Pennsylvania economy, designed specifically to provide a basis for long-range unemployment compensation benefit financing, has just been completed by the Temple University Bureau of Economic and Business Research and the Pennsylvania Bureau of Employment and Unemployment Compensation. Although its primary emphasis has been on the factors potentially causative of decline or growth in the level of employment and income as related to the labor force, many important trends with far-reaching effects have been observed.

Economy Still Expanding

Perhaps the most significant finding in this research is that the Pennsylvania economy is now expanding in spite of the fact that it has achieved relative maturity as compared with the United States generally, and thus might be expected to decline both relatively and absolutely as a source of employment and income. The great preponderance of data examined in this research gives every evidence that this is a continuing trend. This results partially from the structural change in the Pennsylvania economy necessitated by the defense effort, but also—and far more importantly—from the fact that the economy of the United States had so little industrial elasticity in the post-World War II period that considerable expansion of industry was essential. Specific evidence of this need is clearly discernible in the pattern of recession and recovery during 1949 and 1950. The resurgence of industrial growth in this period was based almost exclusively on planned long-term expansion and technological redevelopment of industry. It had already begun in Pennsylvania by March 1950, well in advance of the general rise for the United States and considerably before the first defense legislation calling for war industries was introduced in May 1950. Further increases in the level of employment and income occurred subsequent to the Korean crisis, as would be expected, but it is significant that the State had substantially recovered from the effects of the recession before the defense effort was initiated.

The general, perhaps secular, trend of expansion during this period affected all of the areas of the United States, although its weight varied by region in accordance with the primary contribution of each to the economic whole. Certain advantages associated with its resources, its position, and a rapidly developing industrial diversification pattern have combined to make the effect of this trend greater in Pennsylvania than generally. The general position of the Pennsylvania economy is good, and the level of activity as represented by employment and income may be expected to be maintained with some potential growth even under adverse economy conditions, a situation which, until recently, has not been true within this State since the early years of this century.

Detailed specific findings cannot be presented in a short article, but certain of the salient facts indicative of position may be summarized. The complete analysis is to be found in the report, A SURVEY OF THE FINANCIAL PROVISIONS AND ACTUARIAL SOLVENCY OF THE PENNSYLVANIA STATE UNEMPLOYMENT COMPENSATION SYSTEM.

The Pennsylvania economy has developed historically around its natural resources. These have given rise to several distinct geographic entities within the State which are the principal components of its industrial pattern. Each differs markedly from the others as to resources, character, and type of development. In summary, they include:

A. The Philadelphia area, the oldest and probably best diversified center in the State, now based mainly upon a wide range of light manufacturing, some heavy industries, trade, and the service industries.

B. Allentown-Bethlehem-Easton and Berks County, together forming a large industrial area, geographically contiguous to Philadelphia and with it comprising the eastern Pennsylvania industrial belt.

C. The Pittsburgh heavy industry and bituminous coal-mining district.

D. The Scranton-Wilkes-Barre anthracite mining and textile area.

E. Northwestern Pennsylvania, an inland-port area and a manufacturing center.

F. The remainder of the State, characterized by generally diversified agricultural production, some mining, and other enterprises.

It is evident from this descriptive list of the historical and geographic development of Pennsylvania that natural resources have played an important part in its growth. Even today, Pennsylvania ranks second among the States in the annual value of products of the mineral industries, surpassed only recently by Texas—a result of its leading position in petroleum. Historically, Pennsylvania has produced nearly twice as much in natural resources by value of product as any other State in the Union. Clearly, therefore, as its position in resources is worsened with their depletion, developments in other lines are needed to replace this concentration. One of the principal factors in the decline of this State since the first World War has been associated with its high concentration in fuel mining, and heavy industries. The slowly developing industrial diversification, given tremendous impetus by World War II, represents a late adjustment of the State's economy to that situation and has given it a growth potential which will lead to its expansion as an industrial contributor to the economy of the United States. Moreover, the discovery of new mineral resources outside the United States and the need for their exploitation have brought to the fore the eastern area of Pennsylvania as an attractor of iron-and-steel industry plants, due to its advantages in fuel, capital, and labor skills, as well as its market position. These two trends: (1) the development of new heavy industry and (2) the rather rapid initiation and spread of the light industries, form a healthy basis for the general expansion now evident in the economy of this State.

Population

Demographic data indicate that the rate of growth of Pennsylvania's population has decreased sharply relative to that for the United States since 1910. (See table 1.) The industrial maturity of this State is both a contributing factor to and a result of this trend. Similarly, the labor force increased much less rapidly in Pennsulvania in proportion to the increase in population than was true for the United States as a whole, particularly in the period from 1940 to 1950 but also in the earlier decades of this century. Considerable emigration from Pennsylvania is evident, although recent industrial developments appear to have reduced and/or possibly to have reversed this movement. The age distribution of Pennsylvania's population seems somewhat more constant than for the United States, although data on this are hardly conclusive. Thus, labor force may be assumed to be increasing at a decreasing rate.

Changes in the sex distribution of the labor force in Pennylvania are somewhat different from those reported for the United States, the rate of change of utilization of females being less in Pennylvania during the decade from 1940 to 1950. Females are generally employed in the textile and apparel industry and, since World War II in the light manufacturing industries, each of which experienced considerable growth during the period named. This position demonstrates an available manpower resource which may provide for a potential increase in labor force, since in the bituminous coal and heavy-industry areas of Pennsylvania there has been considerably less than average female employment.

Economic Structure

Pennsylvania differs substantially from the United States in its industrial character. In 1940 an average of 6.3 percent of the gainfully occupied population was engaged in agricultural production in Pennsylvania, while in the same year 17.7 percent of the working force for the United States was so employed. By 1950 in Pennsylvania, an average of 6.2 percent and in the United States about 14.5 percent of the labor force was engaged in agriculture. There was, therefore, little change in the agricultural segment of Pennsylvania production, while a substantial change is evident for the United States as a whole. Moreover, although there is considerable seasonal movement in the Pennsylvania agricultural employment, there is not the same degree of dual job reporting nor shifting between agriculture and other occupations as in the United States. This is logical in view of the importance of dairying, meat, and poultry production

Table 1.—*Total population and percentage changes by decade for the United States and Pennsylvania, 1910–50*

Year [1]	United States			Pennsylvania				
	Population (Millions)	Increase by decades (Millions)	Percent increase	Population (Millions)	Increase by decades (Millions)	Percent increase	Population as percent of United States	Change as percent of United States
1910	92.0	.....	17.0	7.66	.....	.....	8.2	.....
1920	105.7	13.7	14.9	[2] 8.7	1.06	13.8	8.1	7.7
1930	122.8	17.1	16.1	9.63	.91	10.5	7.8	5.3
1940	131.7	8.9	7.2	9.90	.27	2.8	7.4	3.0
1950	150.7	18.9	14.5	[3] 10.50	.60	6.0	7.0	3.2
Gain 1950 over 1910	58.2	.....	63.0	2.84	.....	37.1	.....	4.88

[1] *The data shown are for Apr. 1 of each year.*
[2] *Continental United States.*
[3] *Excludes Pennsylvanians in the Armed Forces stationed outside the State.*

Source: U. S. Department of Commerce, Statistical Abstract of the United States, 1950. Government Printing Office, Washington, D. C., 1950, p. 12 and pp. 34–5. 1950: U. S. Department of Commerce, Bureau of Census, Preliminary Release (PC. 9, No. 1).

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which, along with corn and tobacco, are the most important components of this State's agricultural income. There is considerable diversified farming and some grain production in the State, but it is usually carried on in combination with the above, thus reducing such shifts.

A much larger proportion of the working population was engaged in manufacturing in Pennsylvania than was true for the United States as a whole. In 1950, for example, nearly 35 percent of the total working force in Pennsylvania was attached to manufacturing industries, while only about 23 percent was so engaged in the United States as a whole. In both cases, the remainder are employed in mining, construction, trade, and the service industries. This distribution as shown is, and historically has been, characteristic of the type of industry in Pennsylvania, but it is also indicative of the maturity of the structure of this State's economy as compared with that of the United States. In the latter case, the relatively continuous and rapid decrease in agricultural employment, offset by an increase in some secondary but principally tertiary employments, is indicative of both structural change and modification of production patterns. This trend in occupational distribution serves to emphasize the import of Pennsylvania in this area of production.

Income

As would be expected, there was relatively less change in total income payments in Pennsylvania than in the United States as a whole over the preceding decade. Total income increased by 97.2 percent for Pennsylvania, but by 139.1 percent for the United States as a whole. Since the rate of industrialization appears to be related causatively to the level of income, an even more rapid change should have occurred in the United States where the proportion of working force engaged in agriculture decreased more rapidly than in Pennsylvania. At the same time income payments in Pennsylvania as a percentage of total income payments in the United States declined from 8.9 percent to 7.3 percent, as would be expected since the Pennsylvania proportion of total United States population declined over the period 1929–49. However, the average per-capita income payments continued larger in Pennsylvania than for the average of the United States.[1] The movement of per-capita income payments may be partially explained by the fact that Pennsylvania is more heavily industrialized than is the United States as a whole. Accordingly, smaller changes in wage and salary payments were recorded during the war period within Pennsylvania than for the remainder of the country where the proportion of agricultural workers was larger in 1940 than in 1950. Similarly, during the postwar period, while agricultural income has been declining, the average level of industrial payments to workers has been raised.

[1] *Though that be true, the proportion declined from 113 percent of the United States average in 1929 to 104 percent in 1945 and 106 percent in 1949.*

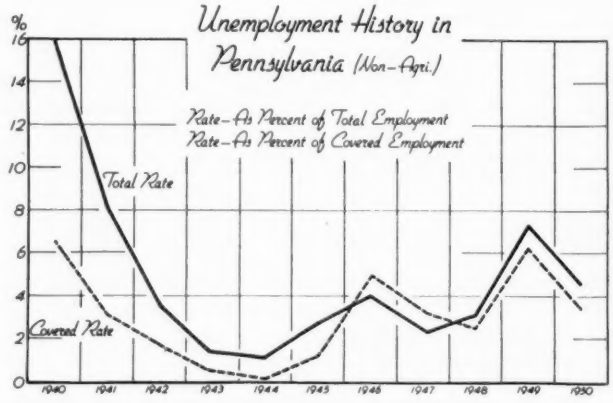
Industrial Structure

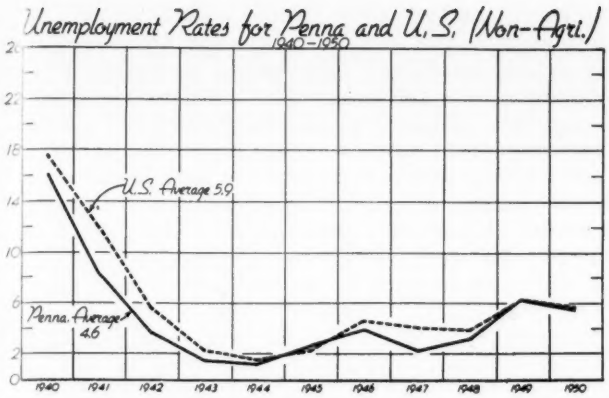
The character of the industrial segment of the Pennsylvania economy differs substantially from that for the United States as a whole. About one-third of the iron-and-steel industry and more than 20 percent of the railroad-building-and-supply industry of the United States is located in Pennslyvania. Since 1940 about one-fourth of the total iron-and-steel industry expansion in the United States has been within Pennsylvania, and during the period 1950–52, more than one-third of such new facilities for the United States are projected for this State. In 1950 nearly 10 percent of the nonagricultural labor force of this State was employed directly in this industry. Furthermore, nearly 40 percent of the coal and coal products industries for the United States are located within Pennsylvania, and, since this industry is directly associated with the heavy-industry group, its general activity parallels that of the heavy industries, thus magnifying industrial fluctuation.

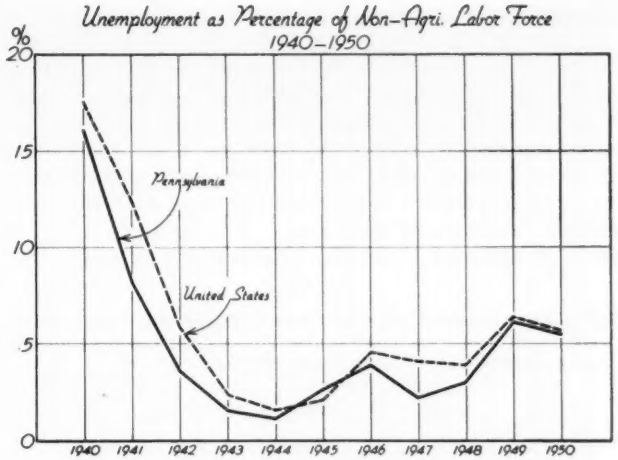
Even though Pennsylvania has a substantial concentration of heavy industry, the range of industries is widely diversified, 1 percent or more of the United States total manufacturing plants in each of the 2-digit standard industrial classifications being recorded for it. Recent expansion in the light industries and the trade and service classifications at rates exceeding those for the United States is significant, both as a modification of the historic industry concentration and as a source of new developmental growth. Characteristic of this group is the electrical-machinery industry. Similar movements are evident in specialty metal fabrication, chemicals and, to a lesser extent, in other light manufacturing industries.

Employment and Unemployment

The concentration of heavy industry within Pennsylvania has tended to accentuate fluctuations in its economic activities and, furthermore, has established certain deviations from the national trend. Because the heavy industries supply other industries rather than a consumer market directly, in any period of rapidly rising activity Pennsylvania tends to reflect the change more quickly than other States (see chart).







For example, in the early prewar period (1941–42) the ratio of total employment in Pennsylvania to its labor force increased much more rapidly than that for the United States.

A similar movement has been effected during the last year with the rapidly accelerating defense program. At the same time these industries tend to accentuate declines, the level of employment as a proportion of labor force tending to fall earlier, more rapidly, and below that for the United States as a whole. Thus it appears that, as the level of industrial utilization increases, the level of employment in the United States tends to rise less rapidly than does that of Pennsylvania. When the level of unemployment is below 5 percent for the United States, in general the level for Pennsylvania will be somewhat lower. However, when the rate of unemployment for the United States ranges from 7 to 10 percent and upwards, that for Pennsylvania seems to be somewhat higher. Currently and for the last 2 decades, this generalization appears valid. Pennsylvania, as a result of its industrial organization, therefore records fluctuations in the level of employment which are parallel to, but more severe than, those for the United States as a whole. Under favorable economic conditions this State tends to have lower levels of unemployment, while under adverse circumstances it tends to have higher levels of unemployment than does the United States. On the basis of these findings, which are supported further by detailed industry correlations, it may be concluded that there is a causal relationship between the level of employment in the United States and that in Pennsylvania. Similarly, it may be concluded that, as the level of employment rises for the United States, it will tend to rise more rapidly in Pennsylvania and vice versa.

It is also significant to note that the degree of seasonal unemployment is far lower in Pennsylvania than in the United States generally. Although certain industries have some seasonal characteristics, this feature is so small as to be relatively unimportant except in these particular industries. The chief factors in changes in the level of employment in Pennsylvania seem to be cyclical, secular, and/or technological.

Framework for Estimating Costs

The trends and relationships summarized herein form a basis for the development of economic assumptions which may govern employment levels for the period following 1951. On the basis of these trends, specific circumstances and industry conditions may be assumed to alter the general levels of activity, the number of covered workers, and the size and duration of benefit payments. By analogy such specific movements may be attributed to the economy and various patterns of unemployment assumed. For the purpose of this study, five alternative patterns ranging from the poorest recorded experience to the very best corrected by adjustment to the generally rising secular trend were selected. Various alternative benefit formulae were also assumed and average costs of unemployment for the next 10 years were estimated. However, neither the patterns of possible unemployment experience nor benefit legislation are intended as predictions, but rather as a frame work for estimating costs. As such they may be considered only as upper or lower limits between which levels actual costs may be expected to fluctuate. Specific corrections in the assumptions can and must be made if the tax rates are to be harmonized with actual costs.

Summary of Crude Cost Estimates

Costs of unemployment compensation in Pennsylvania under the very worst economic conditions, assuming the existence of the present legislation during the next decade, would amount to an average of 1.66 percent of covered payroll. (See table 2.) This economic pattern assumes a full-scale depression and a secondary recession both following the period of defense or war preparation. Even higher costs might be expected if the "garrison" State period was curtailed or greater unemployment experienced than is forecast. It seems unlikely, however, that rates of unemployment in excess of 25 percent of the covered labor force would be permitted to continue for long. Moreover, even though they were, covered unem-

ployment rates would tend to fall as the number of exhaustees increased. It follows, therefore, since the State is in the type of economic situation earlier described and under the legislative maxima cited, that unemployment compensation costs would be most unlikely to exceed an average of 1.7 percent of covered payroll over the next decade. An increase in benefit amount and duration would result in a further increase of this cost. This pattern of costs may be assumed to set the probable upper limit.

Table 2.—*Estimated covered unemployment and crude unemployment insurance costs under various economic conditions with present benefit provisions, 1951–52*

[Costs as percent of taxable wages]

Assumption	I	II	III	IV	V
Average unemployment	6.4	2.5	5.2	2.8	5.0
Average cost	1.66	.73	1.23	.83	1.43
Maximum annual unemployment	18.0	7.0	15.0	6.5	10.0
Minimum annual unemployment	1.0	.8	1.0	1.0	1.0

Under the assumed best possible economy experience (see pattern II), and presupposing the existence of the present legislation throughout the ensuing decade, unemployment compensation costs would average 0.73 percent of covered payroll. Under these same economic conditions, if the most liberal benefit formula studied is assumed, the cost would rise to 0.88 percent. This economy assumption is based on a supposition of total war and hence negligible unemployment rates for a substantial portion of the decade. Further, as a result of war restriction, a period of reconversion and high level activity comparable to that of 1945–49 was assumed to follow. Average unemployment for this period as a whole is therefore low and the fluctuations within, because of the sustained high level, are minor. This economy assumption, therefore, represents the probable lower limit of unemployment compensation costs for the ensuing decade.

In-Between Assumptions

Three economy assumptions lying between these two extremes were selected. Each summarizes a different series of economic circumstances. None assumes total war, but each assumes a different pattern of "garrison" State and post-"garrison" State activity predicted on widely divergent Federal fiscal and international policy. Economy Assumption III, which is the medium assumption, for example, forecasts a long-continued period of "garrison" State activity, marked by gradually diminishing international tensions and hence a slowly decreasing level of defense activity. Therefore, a declining level of employment would be expected to follow as the period progresses. Under this assumed pattern of economic activity, and presupposing the existence of the present legislation, unemployment costs would average 1.23 percent of covered payroll over the ensuing decade. Under this assumption, if the most liberal benefit formulae considered is used, average costs would amount to 1.47 percent of covered payroll. This assumption, therefore, may be considered as representing a fair median cost estimate of the Unemployment Compensation program for this State for the next decade. It will be noted that it compares unfavorably with total costs during the first 10 years of the program. Since this is the case, the estimate may be considered in view of the general secular rise now evident for this State to be conservative.

The Least Dangerous Ground

The two additional patterns represent other variations in the level of economic acitivty and lie somewhere between the medium assumption and the two extremes. Use of any one of these patterns becomes a matter of reasoned judgment. The use of the medium assumption in a period such as the present one where any forecasting is particularly difficult, however, would seem to reduce the chance for wide error in trend or cyclical pattern since the variation on either side of it between the two extremes amounts to about 0.5 percent of covered payroll. Thus, it is evident that the economic situation in Pennsylvania is now such that, within rather narrow limits of deviation, costs of unemployment compensation can be financed on a long-term basis. The degree of error can be sharply reduced, and with it fluctuation of employer tax rates, if complete analyses of the economy and the system are continuously maintained as a basis for formulating financial policy which can compensate for deviations from the assumptions.

All of the above rates must be refined to include consideration of the reserve required under each and the interest earnings of the fund. Because Pennsylvania's economy gives evidence of strength, it appears that the present reserve is adequate. The Fund, however, will earn considerable interest. Refinements, therefore, will result in some small reductions in the average tax rate over the cost rates shown. Clearly, therefore, the economy analysis of Pennsylvania provides a sound basis from which to approach the problem of benefit financing. The study demonstrates that this State is moving into a period of secular incline based partially on external but mainly internal factors. Therefore, it is in a strong position. The resulting benefit costs should be somewhat lower in the succeeding than in the past decade.

Photo courtesy Saunders Studio

Mills along the Merrimac River in Lawrence, Mass.

Job Rotation and Its Effect on Benefit Costs

By Dr. LEWIS F. MANLY

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WORK-SHARING plans adopted by companies and unions have a significant effect on unemployment compensation benefit costs, particularly in periods of heavy and prolonged unemployment. The work-sharing plan that has the greatest potential effect of increasing total benefit costs is the method of rotating the idle portion of a work-sharing group, week by week, into the available jobs. In this way all workers share the employment and unemployment equally. This system, known as "staggered employment" in Lawrence, Mass., has been long established in the worsted mills. The severe unemployment in the worsted industry in 1949, and the accompanying sharp rise in benefit costs drew attention to the role job rotation played in increasing these costs. This article examines the effect of rotation on benefit costs and estimates the additional costs it created in the worsted industry in Lawrence during the benefit year 1949–50.

Employment in the worsted industry fluctuates seasonally and is also influenced by style factors. The firms need a readily available, flexible supply of labor to meet the various labor requirements of different fabrics and variable production loads. Hence work sharing has developed to enable a firm to hold its skilled operatives during slack periods. The use of "staggered employment" antedates both the widespread union organization of the industry, and also public unemployment compensation. Union organization extended the use of work-sharing, and unemployment compensation has substantially increased the incomes of workers during the slack periods.

The union agreements govern the operation of the work-sharing plans. In the mills covered by the United Textile Workers Union, AFL, workers are divided into peak force workers and normal force workers. The peak force workers are laid off indefinitely when work gets slack. Normal force workers are not laid off but share work in their seniority classification in slack periods. These classifications are on an occupational basis and are very numerous. The proportion of peak and normal force varies from one classification to another. As a rule, the ratio of normal force workers to peak force workers is, roughly, two to one. In the Textile Workers Union, CIO, all workers share work in their classification until the average hours worked per week for the group over a 4-week period fall below 32. Thereafter, workers who were hired after September 1, 1941, are laid off until the average hours worked for persons hired prior to September 1, 1941, average at least 32 hours per week. Thus under both agreements there

is a group that is not subject to indefinite lay-off but will share work as long as any is available in their seniority classification.

The benefit costs that occur when rotation is used can be compared to the benefit costs that would arise if some other system was used to adjust to unemployment. A firm may simply lay off workers indefinitely when work grows slack. In this case the maximum benefit cost would occur if all laid-off workers exhausted their benefit rights. If 10 percent of a group of 100 workers is laid off, in the first week of unemployment the waiting period is served, and thereafter compensable weeks accrue at the rate of 10 per week. Assuming all laid-off workers were entitled to 23 weeks of benefit, the maximum compensable weeks for these 10 workers in a benefit year would be 230 weeks.

Effects of Rotation

With rotation the unemployment is not concentrated on 10 workers. Each week 10 different men would be unemployed. It would take 10 weeks for the entire group of 100 men to serve their waiting period. Thereafter compensable weeks would accrue at the rate of 10 per week, and this rate could be continued to the end of the benefit year. Ths is possible because spreading the unemployment over the entire group reduces the average duration of unemployment. For an entire benefit year, with 10 percent unemployment, the average weeks of unemployment for a member of the group would be 5.2 weeks, and 4.2 weeks would be compensable. There would be no danger of exhausting benefits.[1] Hence rotation may be much more expensive for prolonged periods of unemployment since it nullifies the restricting effect of benefit exhaustion on total benefit costs. The more severe the unemployment the greater the difference in benefit costs between rotation and a system of indefinite lay-off. On the other hand, for short periods of moderate unemployment, benefit costs with rotation will be less than if indefinite lay-off for part of the force is used, since with rotation a larger amount of the unemployment is absorbed in the waiting periods served by all members of the group.[2]

If rotation is compared with an alternative form of work-sharing, namely, reducing the hours worked per week for the entire group, the differences in benefit cost will become even greater. With this plan all workers have some employment each week and they are compensated on a partial benefit basis. In Massachusetts, until their part-time weekly earnings fall below their weekly benefit for total unemployment, they receive no benefit. Workers with full-time weekly wages of $50 per week would need to experience more than 50 percent unemployment before partial benefits would fall below the $25 maximum weekly benefit in Massachusetts. A large amount of unemployment will be uncompensated if this work-sharing plan is used, compared to the system of rotation.

The decline in covered employment in the worsted firms is Lawrence in 1949 was drastic. In June 1948 textile firms in that area reported employment of 28,400. A year later in June 1949 the reported employment for the textile firms was 14,100, a drop of more than half the employed force. Total benefit cost for the benefit year beginning in April 1947 was $1,754,417; for the year beginning April 1948 it was $4,049,723; and for the year beginning April 1949 it was $11,564,502. The latter figure constituted over 10 percent of the total benefit costs for Massachusetts in that period. Total claimants in the benefit year 1949–50 in the Lawrence area constituted 64 percent of the 1948 peak covered employment of the area. For the State as a whole, total claimants in the same period were 29 percent of the 1948 peak covered employment. The much higher ratio of claimants to covered workers in the Lawrence area is undoubtedly attributable in considerable degree to the widespread use of work-sharing in that area.

To determine how many compensable weeks will occur with a rotated group in a period of time it is necessary to know the size of the group, the average number of the group idle each week during the rotation period, the number of weeks rotation lasts, and the length of the waiting period. If these magnitudes are known the total compensable weeks occurring can be computed with mathematical certainty.[3] This total can then be compared with the number of compensable weeks that would occur if indefinite lay-off were used instead of rotation under the same conditions. Essentially this procedure was followed in making estimates of the cost of rotation for the Lawrence area. Detailed data required to give the above magnitudes for each firm were not available from the textile firms using rotation. Therefore an aggregative approach was developed, using the payroll data which the firms are required to report to the Massachusetts Division of Employment Security.

From these data for each of the large mills in Lawrence estimates were made of (1) the size of the rotated force, (2) the average rate of unemployment in this group for the period of rotation, and (3) the number of weeks rotation was used. These magnitudes yielded a total of compensable weeks that occurred for the rotated groups for the benefit year 1949–50. An estimate was then made of the total compensable weeks that would have occurred for these groups had a

(*Continued on page 31*)

[1] *If each member of a rotated group is entitled to 23 weeks of benefit, with a waiting period of 1 week, 46 percent of this force could be idle every week of a benefit year without any member exhausting his benefits.*

[2] *Rotation will not create larger benefit costs than indefinite lay-off of part of the force, until unemployment continues longer than the time required for those laid indefinitely to exhaust their benefits.*

[3] *Assuming a waiting period of one week, let A equal the size of the rotated group, U the average number of this group idle each week, and N the number of weeks rotation is in effect. Then total compensable weeks, designated TCW, will equal NU–A. For short periods no compensable weeks will occur with rotation. The maximum value for TCW depends upon the potential duration of weeks of benefit of the rotated workers. If all were entitled to 23 weeks of benefit the maximum value of TCW would be 23A. It will be less than this if all workers are not entitled to 23 weeks of benefit. If the waiting period is 2 weeks, the value of A should be multiplied by 2 in the formula.*

Why the Costs of Unemployment Insurance Benefits Have Been Consistently High in Rhode Island

By THOMAS H. BRIDE, JR.
Administrator
Rhode Island Department of Employment Security

DESPITE a basic similarity in principles and operation, the cost of unemployment insurance benefits shows a wide variance from one State to another. As a rule the economic characteristics of a State provide the primary basis for explaining the cost of benefit expenditures. Obviously, stability of employment or the lack of it depends upon the nature of the economy. However, important as the economic factors may be, there are other causes which exercise some influence. The terms upon which a worker qualifies for benefits, specific customs in the labor market, and the sex composition and other characteristics of the labor force also have their effect upon the costs of unemployment insurance. With due allowance for these other factors, in Rhode Island the chief cause of consistently high benefit costs has plainly been the nature of its economy.

Economic Characteristics

Like other States, Rhode Island's employment picture has been drastically affected by the defense boom, but there have been no changes in the essential make-up of the economy. Manufacturing has been and remains the chief provider of employment. Out of total nonfarm employment of 307,000 in February 1951, manufacturing furnished 160,000, or 52 percent, whereas the national average was only about 30 percent. Farm employment is relatively unimportant in Rhode Island; together with other extractive industries, including forestry, fishery and mining, it accounts for not more than 5,000 wage earners. Approximately 32,000 others not included in the nonfarm total are those who represent the self-employed, domestic and other service workers and the Armed Services personnel.

Thus, Rhode Island, more than most States, depends upon manufacturing employment for its economic well-being; and its changing employment levels are determined chiefly by its manufacturing trends. For example, when the total number of jobs in industry increased by about 30,000 from February 1950 to the same month this year, 23,000, or 75 percent, of this increase in jobs was in manufacturing. This is something of high consequence from the standpoint of benefit costs in Rhode Island. As manufacturing is likely to fluctuate more widely than other sectors of the economy, unemployment and the costs of unemployment insurance in this State would tend to be and have been higher than the average for other States less dependent upon such industries.

The dominance of manufacturing in the State's overall employment picture shows itself again in the number of workers covered by the unemployment insurance law and in our expenditures for benefits. About 60 percent of those covered by the law work in the manufacturing industries, as against the national average of only 45 percent. Manufacturing industry is not only very important as a supplier of jobs, but the bulk of claimants for unemployment compensation, or between 65 and 75 percent of the total, usually come from this section of the economy, which has accounted for similar proportions of benefit expenditures over a period of years.

Rhode Island faces the additional problem that its manufacturing employment is concentrated in industries which exhibit a seasonal pattern, and some of which are of a highly volatile nature. The result is that a large proportion of industrial workers are laid off at certain times of the year.

Three industries—textiles, metals and machinery, and jewelry—furnish at present approximately 77 percent of all manufacturing employment. This is almost exactly the same proportion of total manufacturing employment provided by those industries in 1949. It is therefore obvious that while unemployment has been greatly reduced in the past year, the basic industrial pattern of the State has not been changed.

Rhode Island may be able to further diversify and strengthen its economy, but the absence of any important natural resources or agriculture compels the State to depend for a large share of its employment upon manufacturing. In particular, over the years, it has depended heavily for its jobs upon the various branches of the textile industry. Although some textile plants have relocated elsewhere over the past 2 or 3 decades, this industry still remains the largest single provider of employment in the State.

The fact that Rhode Island is so highly industrialized is evidence that it has enjoyed certain advantages over other areas for purposes of manufacturing activity. Its possession of a fine natural harbor, its easy access to our eastern population centers, and a labor force trained for and accustomed to factory work, have all been in its favor. Moreover, its business community both includes experienced industrial management and is well organized to provide its manufacturers with essential supplies and services.

But some of the original advantages have tended to be offset in recent years by shifting centers of population and the accompanying changes in transportation costs, the development of low-cost power in other areas, and the lower wages elsewhere for that less skilled labor which can often be more readily utilized in operating modern equipment. Furthermore, because of the age of its industry, especially in the field of textiles, many of Rhode Island's plants are old and not always well adapted to modern production methods. Hence, their operating costs are likely to be higher than those of the many competing plants more recently constructed in other parts of the country. As a result of these several factors, a slackening in demand has often hit Rhode Island industry harder than that in other States. This was forcibly demonstrated in the recession of 1949, when the rate of unemployment among wage earners in the State jumped to nearly 20 percent, which was about three times as high as the national average.

In that recession, the rate of decline in the leading manufacturing industries here was considerably greater than for the country as a whole. Between January 1948, when postwar employment reached its peak in Rhode Island, and July 1949, over-all manufacturing employment fell 22 percent in this State as against a decline of about 15 percent for the country. Textiles declined by 26 percent in the State and only 19 percent for the country; metals and machinery, about 31 percent for the State and only 18 percent for the country. Employment in jewelry, largely a Rhode Island industry, dropped nearly 13 percent in the same period. On the other hand, the difference in the decline in employment in nonmanufacturing industry between the country as a whole and Rhode Island was less than 2 percent.

The greater impact of the recession upon important branches of Rhode Island industry is undoubtedly due to many causes which are the result of historical and economic changes that have taken place not only in the State, but in other sections of the country. The nature of some of these changes has already been briefly considered. Whatever the precise causes, the fact remains that certain dominant Rhode Island industries are subject to periodic and serious declines in activity. The textile industry reacts to inventory accumulations by reduced operation and employment, partly in response to seasonal influences; the metals and machinery industry is subject to cyclical rises and declines in demand for capital goods; and employment in the jewelry industry is not only affected by the level of national income, but by seasonality which leads to periodic widespread suspension of work semiannually.

Rhode Island's higher benefit costs could thus be explained by two economic reasons: Its heavy dependence upon types of manufacture subject to frequent and sharp fluctuations and for some segments of its industry an inferior competitive position which results in greater declines in activity and employment in its plants. The latter would be more important in periods of recession, but the former would account in large part for the constantly high benefit costs found in the State.

The Labor Market and the Labor Force

The large ratio of women in the labor force is another feature of the Rhode Island labor market which affects the cost of operating the benefit program. In the study, "Benefit Financing and Solvency of the Employment Security Fund in Rhode Island," it was shown that while female workers made up 40 percent of the Rhode Island labor force, as against a national average of only 30 percent, they often constituted about 50 percent of its unemployed and of its benefit claim rolls. This is primarily due to the fact that women are concentrated in those manufacturing fields which have a greater instability and usually experience the more severe declines. There are, however, other reasons why female workers have presented a special cost problem to the unemployment insurance program. For example, it was found that a large proportion, or nearly 85 percent, of the female workers who filed claims for benefits in 1949 had one or more other members of the family ordinarily employed. From this it would be reasonable to assume that many of these unemployed female workers were not the chief providers of the family income, and on that account would be under less pressure to seek immediate reemployment after a lay-off. Another study of claimants conducted at about the same time showed that nearly 20 percent of all female workers worked less than 6 months in covered employment in 1948, as compared with 14 percent for males. Under these circumstances, it would seem that a large ratio of female workers in the labor force is likely to increase the costs of the unemployment insurance program, particularly if the earnings qualifications for benefits are too easily met.

Benefit costs may also be affected by specific industrial practices in an area or industry. For instance, a widespread method of work sharing in Rhode Island is through staggered employment or job rotation, a practice that seems to have been established in the textile industry, but is now used in other industries, especially jewelry. This job rotation system may appear under various patterns of alternating periods of employment and unemployment; but in its most common form it consists of one week of full employment followed by one week of total unemployment. Rotation may be introduced in one or several departments because of unbalance in operations, or the entire work force may rotate.

Although a common industrial practice in Rhode Island, and undoubtedly a cost factor, it has not always been possible to measure the precise effect of the "stagger" system on benefit costs. How costly it is depends upon what method of curtailing operations would be used as an alternative to the "stagger" system. If the method used were an equivalent reduction in weekly hours of work for all workers affected, this would definitely be less costly than the "stagger" system. This follows from the fact that workers who work some part of every week during a period of reduced operations would have their weekly benefit amounts reduced by approximately the amount of their earnings each week. Inasmuch as the weekly benefit amount for total unemployment represents on the average only about half a worker's full-time weekly wages, earnings even for a sharply reduced workweek would largely tend to cancel out any benefits that might be payable.

If, on the other hand, the choice lay between outright lay-offs and staggered employment, there is clear proof again that the latter would be more costly, particularly where its use is extended over a considerable period of time, as it often has been in Rhode Island. Moreover, as opposed to outright lay-offs, the "stagger" system, as any other form of work-sharing, tends to increase future liability to the benefit fund by enabling workers who would otherwise be totally unemployed to continue to build up benefit rights for future use. Finally, by impeding the flow of excess workers to other jobs or industries, the "stagger" system has tended to perpetuate underemployment for a considerable part of the labor force. In actual experience, then, the practice of staggered employment, whatever its other effects may be, has meant a serious additional drain on the benefit fund.

Legal Provisions of the Benefit Program

A third group of reasons for the level of costs of a system of unemployment compensation is related to the benefit qualifications. It is axiomatic that ideally the requirements for benefits should be such as to cover all workers who are regularly attached to the labor market and at the same time exclude all occasional and casual workers from benefits. Of course, it is not easy to set up a benefit criterion, but it can be accepted that a worker seeking full-time work is obviously attached to the labor market, and those satisfied with occasional employment are not fully attached to the labor market in the same sense. Attachment to the labor market is obvious in the case of those steadily employed, but it is not always easy to ascertain in the case of those who are idle. It is therefore essential to establish criteria for attachment either based upon earnings in a given period or time worked in covered employment or a combination of both. Except for the first year of operations, Rhode Island required $100 of earnings in the preceding year as a qualification for benefits, an amount which could be earned in as little as 2 or 3 weeks of work at postwar wage rates. From the beginning, this requirement was not an adequate test of attachment to the labor market, and consequently some occasional and casual workers have been able to draw benefits. The study cited above showed that 6.4 percent of all claimants—4.5 percent male workers and 8.2 percent female workers—earned under $300 in 1948. The high percentage of female workers earning less than this amount tends to reinforce the belief that a large proportion of women workers in the labor force has tended to increase costs. Recognizing the total inadequacy of $100 as a minimum earnings requirement for eligibility, the January 1951 session of the General Assembly raised this amount to $300. This may be considered a step in the right direction, but it still falls far short of providing a test of real attachment to the labor market without some other requirement involving length of time worked. At current wage levels, the average factory worker could earn this amount in from 5 to 8 weeks, and could scarcely be considered as fully attached to the labor market on the basis of so brief a period of employment in the course of a year.

The foregoing discussion has attempted to bring out the more important reasons for the high costs of unemployment insurance in Rhode Island. How high these costs are may be illustrated by the relationship of benefits to taxable wages in the years 1948 and 1949. Thus in the high employment year 1948 this ratio was 2.5 percent for Rhode Island as against only 1 percent for the United States; in the recession year of 1949, it was 6.3 percent for Rhode Island compared with 2.2 percent for the country as a whole. Analysis has shown that only a minor fraction of the cost differences between this State and the Nation as a whole can be explained by differences in legal provisions. We are thus left with the nature of the economy as the prime cause of the consistently higher benefit costs in Rhode Island.

It appears that unemployment benefit costs are one side of a larger and many-sided social and economic problem. As a pioneer in the development of textiles, Rhode Island has in the past relied heavily upon this industry; but in more recent years textiles have been facing increasingly severe competition from new plants in other regions. There is general recognition by all groups in the State that Rhode Island, like all New England, must attract new and diverse industries if it is to furnish sufficient employment for its growing labor force. Yet between 1919 and 1947, average monthly employment of workers in all manufacturing in Rhode Island declined by 7,400. The shrinkage in average monthly employment in textiles during this period was slightly above 20,000 workers, whereas there were gains in other lines, for example electrical machinery which added 3,100 workers. In common with other New England States, Rhode Island is undergoing a gradual, long-term change in its economy. To offset a declining textile industry, we are trying to broaden our economy in other directions, particularly in the manufacture of durable goods, which would be less subject to sharp seasonal ups and

(*Continued on page 29*)

Biggest open cut copper pit in the world. Bingham Canyon, Utah.

The Effect of Seasonality on the Cost of Unemployment Insurance Benefits in Utah

By SHERRILL W. NEVILLE

Chief Statistician
*Utah Department of Employment Security**

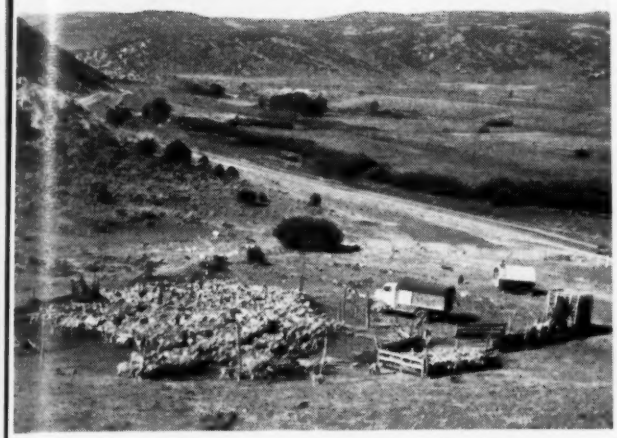
UNDER present law each State has individual responsibility for unemployment insurance financing and reserve fund solvency. The State of Utah recently investigated its unemployment fund financing with the assistance of Dr. Michael T. Wermel of the Bureau of Employment Security and Dr. El Roy Nelson of the Bureau of Economic and Business Research, University of Utah.

One of the first observations was that Utah had economic peculiarities. Other States had individual problems. One State felt that the job rotation was a problem. Other States had determined that a single-industry economy constituted high potential unemployment cost. Still other States had determined that a balanced mixture of basic industry, diversified manufacturing, and a broad geographic base set potentially low unemployment insurance costs.

Utah, with its four pleasantly defined seasons, is a delight to tourists, hunters and ski enthusiasts, but is a headache to employers. With more than 250 sunny days per year, water reserves are built up during January, February, and March. Precipitation outside those months comes generally as a bonus. As a result, after-Christmas doldrums, with almost constant blizzards or potential blizzards for the next 90 days, lock up most outside activity. Both employers and workers accept this as a *fait accompli*. It was normal and inevitable. The Utah Agency and the University of Utah decided that as much as possible should be found out about the relationship between our seasons and benefit costs.

It was found that since the unemployment insurance program has been in operation during the past 13 or 14 years, business has been more seriously plagued by recurrent seasonal employment declines than by the down-swings of the business cycle in Utah. During periods of cyclical depression, the relative importance of seasonal unemployment in mining, manufacturing, and service increases, while in construction the absolute volume declines. The changes in seasonal unemployment in nonagricultural pursuits are related to the changes in agriculture. There is a great similarity between the two movements, in their timing as well as their magnitude. In winter when the number of jobs in covered industries is approximately 17,600 less than the seasonal peak, the number of job seekers is increased by the influx to the industrial labor mar-

** The writer relied heavily on the work of Gerald Clark Stromberg, a statistician in charge of the seasonality research.*



Grazing is an important part of the agricultural economy of Utah.

Cutting corn for winter livestock feed. Silage is a valuable supplement to winter range grass.

ket of workers who are engaged in agriculture in the summer. Thus, unemployment in winter is increased from both segments. Table 1 illustrates monthly fluctuations in benefit costs as a percentage of average monthly subject wages. Because of time lapse in benefit payments unemployment actually occurred 3 to 4 weeks prior to date of payment on the average.

Table 1.—*Ratio of monthly unemployment insurance payments to subject wages in covered industries in Utah 1946–50, selected months*

Year	January	February	March	September	October	November
1946	2.0	2.7	3.8	1.4	1.2	1.1
1947	1.5	1.6	1.5	.7	.7	.7
1948	1.3	1.4	1.5	.7	.5	1.2
1949	2.9	3.1	2.6	1.6	1.6	1.8
1950	3.0	3.6	3.7	.6	.4	.6

The Utah Economy

Other factors about Utah's population and labor force had to be assayed to properly orient the seasonality problem. Largely because of religious influences, the population patterns in Utah are different from those of any of the surrounding States. It has: (1) The highest, or second to the highest, birth rate of any State in the Union. Usually New Mexico's rate is higher. (2) Lowest or the second lowest death rate in the Nation. Occasionally one of the Dakotas has a death rate lower than does Utah. (3) The highest effective birth rate of all the States in almost every year. (4) The highest percent of the population attending college. (5) The highest general level of education of any State in the Union.[1]

Utah includes approximately one-half of 1 percent of the population of the United States. In round numbers approximately three-fourths of a million persons reside within the State. Salt Lake City, Ogden, and Provo are its only large cities. Its trade area covers parts of Wyoming, Idaho, Montana, Colorado, Nevada, and Arizona.

Utah has balanced basic industries. Employment in agriculture with all the extremes of summer and winter may fluctuate between levels of 30,000 and 40,000 workers during the year. Of 1949 Utah income payments 10.6 percent were reported in agriculture by the Department of Commerce. Manufacturing employment levels fluctuate between 25,000 and 35,000 workers. Manufacturing payrolls account for 9.9 percent of 1949 income payments to Utah individuals according to the Department of Commerce. Employment in mining, the third basic industry in Utah, holds relatively stable at levels between 12,000 and 14,000 during any 1 year and its payrolls account for only 5½ percent of Utah income payments. However, mining is truly a basic industry because many other industries are dependent upon it. It is more important than it appears, providing approximately 65 percent of the tonnage originated on Utah railroads. Much of the manufacturing in the State is directly associated with mining.

When a group of technicians from Western States conferred about common problems of financing unemployment insurance, a full day and a half was given to State presentation of possible unemployment limits State-by-State that could be expected under an unfavorable business cycle. No two States could agree on identical assumptions. Searching questions about the reasons for differences usually brought informative answers and in each and every case the informative answer was based upon knowledge of a peculiar combination of economic conditions found only in the State being questioned.

The Problem of Seasonality

Nearly all States have problems of seasonality. The Utah problem is unique in that most industries are involved and the timing of the seasonal fluctuations apparently culminates and ebbs in September and

[1] *Unemployment Insurance and the Utah Economy, December 1950. Industrial Commission of Utah, Department of Employment Security.*

Table 2.—*Ratio of monthly unemployment insurance payments to subject wages in Utah 1946–50*

Year	January	February	March	September	October	November
Mining						
1946	1.1	3.7	7.0	2.3	1.9	1.5
1947	1.3	1.3	1.1	.5	.6	1.0
1948	.8	.8	1.1	.4	.3	3.9
1949	7.0	4.4	1.6	3.0	3.2	4.3
1950	2.4	2.4	2.6	.5	.3	.3
Contract construction						
1946	6.9	8.4	10.0	.8	.7	.8
1947	3.1	3.8	2.9	.7	.7	.8
1948	2.6	2.8	2.7	.2	.2	.4
1949	5.2	7.4	6.3	1.0	1.1	1.4
1950	7.3	9.5	8.1	.2	.2	.3
Manufacturing						
1946	4.3	4.5	5.7	1.9	1.6	1.5
1947	1.9	2.2	2.0	.8	.6	.5
1948	1.3	1.5	1.4	.6	.4	.5
1949	2.4	2.7	2.3	1.5	1.2	1.5
1950	2.9	3.3	3.6	.5	.4	.4
Transportation, communication, and utilities						
1946	.8	.9	1.3	.8	.7	.6
1947	1.0	1.2	1.2	.5	.5	.5
1948	.9	.9	1.0	.4	.3	.4
1949	.9	1.2	1.4	.8	.8	.9
1950	1.6	1.9	2.1	.3	.2	.3
Wholesale and retail trade						
1946	.6	.9	1.4	1.2	1.1	.9
1947	1.0	1.2	1.2	.9	.8	.7
1948	1.1	1.2	1.4	.9	.8	.8
1949	1.5	2.0	2.3	1.6	1.6	1.5
1950	2.2	2.9	3.2	.8	.6	.8
Finance, insurance, and real estate						
1946	.3	.5	.6	.7	.6	.5
1947	.6	.4	.3	.4	.4	.5
1948	.7	.6	.5	.4	.3	.3
1949	.5	.7	.7	.7	.8	.8
1950	1.0	1.1	1.1	.4	.4	.6
Service and miscellaneous						
1946	.7	.9	1.5	1.1	1.0	.9
1947	1.3	1.4	1.4	1.0	1.1	.9
1948	1.6	1.7	1.8	1.1	.9	1.2
1949	2.3	2.7	2.7	1.9	2.0	2.2
1950	3.3	3.6	3.8	1.0	.9	1.4

February, respectively. It is the cumulative effect of all these sometimes small but economy-wide seasonal lay-offs which causes the problem. Some States have reduced unemployment insurance costs by adopting provisions in the law that deny benefits to seasonal workers. The Utah law approaches the problem quite differently. Practically all Utah firms are subject to seasonal influences. Construction, mining, manufacturing, trade and service industries, without exception, show signs of seasonality. Thus, in Utah because of the prevalence of seasonal employment opportunities, a worker can be seasonablly employed in two or more seasonal industries. This provides him with sufficient work history logically to consider him as being attached to the labor market. Labor market attachment then becomes the determining factor. Under Utah law a claimant is considered attached to the labor market if during a 12-

month period he has worked 19 or more weeks and earned at least 16 percent of the average wage of all Utah workers. Thus, the Utah law recognizes the extent of seasonal employment in its industrial make-up and lets benefit eligibility rest on a simple labor market attachment test. However, it must be noted that this 19-week employment test rules out the single season or short season worker who is in the labor market for less than 4 months.

When labor turn-over is combined with seasonal or multiseasonal employment, however, eligibility is maintained and unemployment insurance costs from the combined factors are higher than they would be from the influence of either one considered alone.

For example, in retail trade it is customary to expand employment for the Christmas season. New employees hired in November and laid off in January usually are ineligible for unemployment insurance benefits. However, some of the workers hired for the Christmas rush have had other employment and therefore qualify for benefits. Still other newly hired workers are kept while marginal and less-efficient older employees are laid off. The older employees are eligible for unemployment insurance.

If the unemployment insurance principle of partially compensating a worker for involuntary wage loss is accepted as socially desirable, then the whole economy stands to gain from maintenance of purchasing power and employment stabilization. For example, even though finance, insurance, and real estate industries are less seasonal than any other group, perhaps no other industrial segment gains so much from maintenance of purchasing power and stability of employment.

Methods

The method of studying Utah seasonality consisted principally of preparing and analyzing monthly employment data available as a byproduct of the unemployment insurance quarterly contribution reports. These data were compared with local office byproduct data such as active file and claims counts. In Utah, fairly complete and consistent industrial employment data were available for 13 years covering the period from 1937 to 1949. In some industries the war years were not usable for seasonal analysis because the emergency completely changed the patterns of employment. This was particularly true in coal mining, where an export market developed to keep Utah's coal mines operating at top levels. The easily digested "benefit cost" ratio in table 2 illustrates mining industry experience since the war. Other more technical measures were developed to study deviations from normal in terms of absolute and percentage declines from seasonal peaks.

The actuarial formula deals with historical costs, unemployment ratios and duration, benefit formula provisions, and administrative policy. The attempt to isolate and identify the effect of any one single factor such as seasonality on the over-all unemployment insurance cost is of use not to lend more accuracy to the estimating procedure, but to explain unemployment costs. The administrator's job is not done when he has arrived at adequate reserve fund criteria or expected average annual costs. The administrator must answer questions. As long as there is a Nationwide UI program, comparisons between States are bound to raise questions. Seasonality research has given our administrative office some answers.

Benefit Cost Ratios

The benefit cost ratios in mining show seasonal influences, and like other industries, have high winter costs. The mining industry is more concerned with cyclical and irregular influences, as evident in the high costs of 1946 and November 1948 when labor disputes affected the data and in 1949–50 when metal prices closed many mines.

Construction, without question, is the most seasonal of all covered industries. The severity of winter weather is apparent from year to year in the ratios.

In manufacturing, the food group is most seasonal, with employment in sugar beet refining, fruit and vegetable canning, and poultry and meat processing going from low levels of under 1,000 workers to high seasonal peaks of 2,000 in sugar, 7,000 in canning, and 2,000 in meat products. The drain on the unemployment insurance fund is not too severe in food manufacturing because many of the seasonal workers are not eligible. Textile and apparel manufacturing, lumber and wood products, paper, fabricated metal, and stone, clay and glass, all show heavy seasonal fluctuations and consequent high unemployment insurance costs. Employment in the stone, clay and glass industry is directly related to the demands of construction. The others are related to agriculture.

Trucking is related to construction while other transportation is somewhat related to the holiday seasonal pattern. The seasonal fluctuations in trade and service are well known and are related to holidays, school schedules, and the demands generated by the seasonal basic industries.

Table 2 presents the industry detail of winter and autumn costs for the past 5 years.

(*Continued from page 25*)

downs and which would provide a higher proportion of job opportunities for men. Industry plans for investment in manufacturing plants and equipment in 1951 indicate a noticeable trend toward greater diversification, with the largest growth in miscellaneous manufacutring, other than jewelry. Recognition that such growth can be speeded and directed was shown this year by the Rhode Island General Assembly, which at the recommendation of Governor Dennis J. Roberts set up a State development agency to plan and encourage industrial and commercial expansion in the State. Upon the fruition of the Governor's plans to build a more sound Rhode Island economy rests the best possibility of our reducing the costs of unemployment insurance.

Improved Outlook for State Funds

Excerpts from the October 1950 Report of the Interstate Conference Committee on "The Long-Range Financing of Unemployment Benefits Under State Unemployment Compensation Laws"

Last spring even before the Korean War started, business and employment began climbing again—and benefit claims began falling. The war speeded those trends. Prices, wages, payrolls, and profits have been rising. More people are working. Benefit claims and payments are shrinking in volume.

The growing impact of the Nation's new defense program should mean less unemployment—at least for several years to come. So the current financial outlook for State unemployment funds is much better than it was early in 1950. More jobs and rising payrolls should mean somewhat higher contribution receipts, lower benefit expenditures, and slowing rising balances.

But potential benefit liabilities will be rising, too. And growing dollar balances may tempt some States to cut their contribution rates unwisely—instead of using higher rates to build added reserves during the good years just ahead.

In any event, every State now has a "second chance"—to finance its own benefit program adequately, on a sound long-range basis. The shakier State funds, especially, should not miss the new opportunity to build more solidly for the future. (Mere current solvency does not assure their long-run adequancy.)

Each State should certainly review its own fund experience and prospects—and then take any action clearly needed to meet its own long-range benefit obligations.

Rough Measures of Fund Adequacy

It should be clear that mere dollar amounts—and dollar changes—cannot safely be used as measures or indicators of sound State financing, even though a sharply declining fund balance may be a good danger signal.

It is tempting, but misleading, to make raw dollar comparisons, not only for a single State from year to year, which is hazardous enough, but also between States, which is worse (considering differences in size, coverage, industrial pattern, benefit formula, etc.).

How much do dollar fund changes mean—even within a single State? A sharp decline may spell trouble; but does a fund's growing dollar balance always mean greater adequacy—or assure its future solvency?

The fund's dollar growth may have been accompanied by wider coverage, or by amendments to provide better benefit protection; so the fund's dollar increase may fall short of covering the fund's increase in liability.

Past benefit dollars are clearly a poor guide to future benefit drains; so any comparison of past benefit dollars with current reserve dollars may prove treacherous.

Most States have liberalized their benefit provisions a lot, during recent years; so the benefit dollars paid years ago are now out of date, as guides to the future.

Even the benefits paid in 1949 may be a poor guide—since that was a rather good year, in most States. Besides, the State benefits paid in 1949 do not fully reflect the long-run shift by veterans—starting in August 1949—from Federal to State jobless claims and payments.

Few States have yet experienced the severe benefit drains which could occur—under depression conditions—even with their *present* benefit provisions.

Weekly benefits are bound to rise further, during the years ahead. Enough inflation has occurred during the past decade to boost maximum weekly benefit amounts—and average payments—substantially. Still more inflation is now in progress—and in prospect. Benefit levels must—and will—rise accordingly, in each State.

Even benefit durations may be increased further, by each State, especially if and when a depression occurs. (Mass unemployment would be sure to raise that issue.) So that is another possibility to recognize—when measuring the adequacy of a State's reserves by its recent benefit payments.

Despite their limitations, data on past State fund experience must, of course, be used, in analyzing fund prospects, with a view to adequate long-range financing.

Useful comparisons can best be made by relating certain key dollar data to a common base and by comparing the resulting percentages or "ratios."

The States have therefore made increasing use of their covered payrolls, i. e., taxable wages, as a common base for several key financing ratios.

Each State's covered payrolls are its contribution base, by law. So it is handy and informative to relate the State's benefits and fund balance to that same base. The resulting ratios permit ready comparisons—between each year's contributions, benefits, and reserves.

Covered payrolls are thus employed, as a common base, not only for a single year but also to permit useful comparisons between years. When each year's contributions, benefits, and reserves are stated as percentages of its covered payrolls, the resulting ratios can readily be compared for different years.

(Using ratios tends to minimize the distorting effects of coverage changes, inflation, etc.)

Even such ratios can only help to measure and analyze past experience; so they should be used with caution, as applied to future financing.

In short, there is no valid substitute for adequate State financing studies and estimates—allowing for all the relevant factors and the ways in which future developments may outmode past experience.

State Studies of Benefit Financing

Individual State studies as to the long-range financing of unemployment benefits are a vital step toward meeting State responsibilities in this field. They should help to promote any needed State action to assure the solvency and adequacy of each State unemployment fund.

In the middle thirties, when the employment security program was getting started, only limited statistics on employment and unemployment were available. Only the roughest kind of estimates could be made as to probable unemployment benefit costs.

Since then, over 13 years of State operating experience have supplied far more facts and have revealed a wide range of benefit costs among the 51 State agencies. During these years, the operations of the employment security agencies have also produced a large volume of statistical data on employment and unemployment. Those data now make it possible to reexamine in each State the potential costs of unemployment benefits, in accordance with the economy of the individual State.

The current need for such a reexamination is clear. Establishment of this Committee by the Interstate Conference 2 years ago was one sign that the State agencies recognized the need to reevaluate the financing of their unemployment benefit laws. A second sign was the establishment by the Bureau of Employment Security of a Financial and Actuarial Studies Branch, to work with the States on this fundamental problem.

Benefit experience during 1949, when a moderately severe employment recession struck in many of the States, and recent proposals for Federal action have further demonstrated the urgency of State studies at this time.

Under the stimulus of the new defense program, it now appears likely that unemployment will not be severe in any State in the immediate future. This does not mean that the States can now end their concern with the problem of long-range financing; rather, it offers a real opportunity to consider this important problem carefully without the stress of emergency conditions.

Slowly rising reserves—now in prospect—should not encourage further rate cuts in any State, unless such action is clearly justified by an adequate State study.

Job Rotations

(Continued from page 22)

system of indefinite lay-off been in operation during this period. This estimate was made by studying the monthly pattern of employment for each of the mills involved during this period. The difference in compensable weeks was then multiplied by $25 to give the additional dollar cost created by the use of rotation. The maximum $25 weekly benefit rate was used because of the high earnings in 1948 and the favored position of rotated workers relative to employment opportunity.

The foregoing procedure yielded a figure of approximately $1,000,000 as the additional benefit costs resulting from the use of rotation in these mills during this period. This constituted approximately 10 percent of total benefit costs attributable to textile unemployment in this area. The added cost expressed as a percent of benefit cost of the firms directly involved in the estimating procedure would be a larger figure, but the total of their benefit costs was not available. Due to the aggregative method used the estimate is undoubtedly subject to some margin of error. On the basis of the conservative assumptions used in the estimating process the estimate of additional cost is likely to be too small rather than too large.[4]

The implications of rotation from the viewpoint of financing a program of unemployment compensation are of interest. Compared to a system of indefinite lay-off, rotation will be less expensive if unemployment is moderate and of relatively short duration. However, if unemployment is severe and prolonged, rotation will add substantially to benefit costs. It is under depression conditions that the effects of rotation will be the most significant. The rotated worker is enabled to maintain some wage income which provides assurance of future benefits. If rotation, like other work-sharing plans, has the effect of increasing the size of the work force relative to the employment available, a persistent increase in benefit cost may result since the unemployment rate for the group is thereby increased.

Comparing rotation with a plan of work-sharing that reduces the hours worked per week for the whole group, rotation is more costly due to the fact that rotation distributes unemployment in units of a week, and thereby enables the worker to draw benefits at the rate provided for total unemployment. This is a substantial advantage for the rotated worker, but it raises questions of policy, since in fact, the rotated worker is truly a part-time worker favored over other part-time workers whose unemployment occurs in units of time of less than a week. Inequities may also be created among the subject firms of an unemployment compensation system in the allocation of its cost, if part of the firms use this system of work-sharing while others do not. However, unless rotation becomes much more widely used than at present, these issues will not be serious ones in many States.

[4] *For details of the estimating procedure and for appraisal of the estimate, see "A Report on Unemployment Compensation Benefit Costs in Massachusetts." Monograph 5, Massachusetts Division of Employment Security, Boston, 1950.*

Manager and personnel of the Bowling Green, Ky., local office plan itinerant program. Left to right: Aubrey Davis, interviewer-examiner; Hallie Richardson, interviewer-examiner; Ernest Holland, interviewer-examiner, itinerant service supervisor; Ben H. Wood, manager; Goldie Guffy, interviewer-examiner, claims supervisor.

The Itinerant Service Program in Kentucky

By SIDNEY L. WYATT
Field Supervisor
Division of Employment Service, Kentucky Department of Economic Security

KENTUCKY is primarily a rural State. It consists of 120 counties, and the majority of the population reside in small and medium-sized communities. The Division of Employment Service of the Department of Economic Security maintains 24 full-time local offices which serve the residents of 62 of the counties on matters pertaining to job placement and unemployment insurance. The residents of the remaining 58 counties are provided service bv the maintenance of itinerant points located in each of these counties. Excluding claims taken in Louisville, data collected during a representative month in 1950 indicated that 27.4 percent of initial claims and 38 percent of continued claims were processed at itinerant points. Because of the above factors, the successful operation of the itinerant service program in Kentucky is a continuing challenge to the personnel of the Division of Employment Service; and constant efforts are made to assure that prompt and satisfactory services are made available to persons who are entitled to them.

During the month of September 1950, it was decided to establish the test office program in Kentucky for the purpose of conducting studies and testing procedures in an effort to improve local office operations. The appointed policy and working committees selected the Bowling Green local office for this purpose because it is a representative medium-sized office that serves six counties and maintains two itinerant points. Plans are under way to install in all local offices in the State which maintain itinerant service the improvements developed in the itinerant service program of the Bowling Green area.

One of the first projects undertaken was the complete review of existing procedures and operations used in connection with the itinerant service program with

the objective of improving, State-wide, this very important local office activity. After preliminary studies were made of records and reports available in the local office, designated members of the working committee and the local office manager visited two itinerant points to observe and get first-hand information regarding the manner in which the operation was being conducted.

Never Sure of Space

In common with numerous other itinerant points with which committee members were familiar, it was noted that the physical layouts were not too satisfactory due to the necessity to use facilities made available by county or city officials. Quite often the space provided on one visit will not be available at the time of the next visit, which necessitates the changing of rooms or space and in some instances requires moving to a different building.

The basic improvements obtained in the itinerant service program as a result of the project conducted through the test office are as follows:

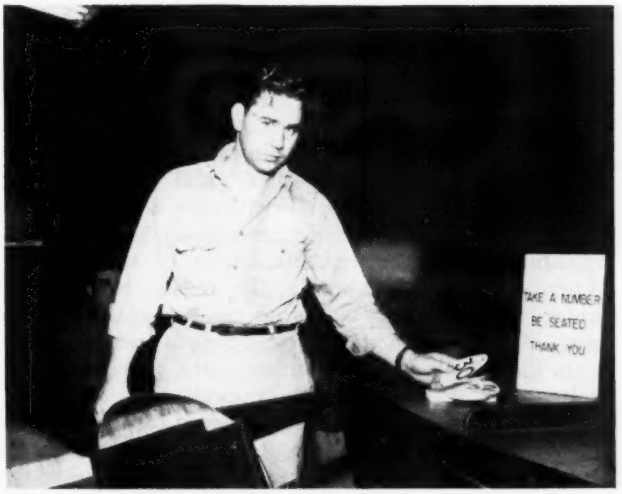
Physical appearance.—In order to make the physical appearance as much like a local office as possible, signs were made for use in guiding claimants and applicants to the room where the service was offered, arranging desks, tables, chairs, files, and supplies in such a way that there would be a minimum of confusion and lost motion. Tables and chairs were arranged so that the local office representatives would be facing the entrance to the room and far enough removed from the general waiting space so that individual interviews would be as private as possible. Chairs were provided for claimants and applicants while being interviewed.

Scheduling of claimants.—When the committee proposed that claimants be required to report according to an established schedule, the staff of the office unanimously expressed the opinion that any attempt to schedule claimants at itinerant points would prove unworkable and would only result in confusion and unfavorable publicity. They indicated that some claimants rode with other claimants; groups of claimants rode buses; others would just fail to report according to schedule; therefore, the scheduling as proposed would only result in failure. But, after much discussion the manager agreed to try the proposed scheduling system, although he was doubtful whether it would prove satisfactory.

Hourly Schedule for Claimants

According to the plan put in operation, claimants who report to file continued claims are scheduled on an hourly basis during the period when the local office representatives are at the itinerant point. This arrangement was made in order to avoid having the majority of claimants waiting for service at the time of arrival and then having only a few more reporting during the rest of the period.

The scheduling was arranged by using the last



Claimant at itinerant point takes a number as he enters the room. He will be serviced when his number is called.

Hallie Richardson, interviewer-examiner, right, questions a claimant at itinerant point. At right note spindle and numbers that are taken up when claimants are called.

Ernest Holland, itinerant service supervisor, left, interviews claimant at itinerant point.

digit of the claimant's Social Security number in determining the hour to report. The hours for the claimants to report on subsequent visits were marked in red on the identification cards and the claim record cards. Claimants are required to adhere to the reporting schedule, except in hardship cases due to transportation arrangements, or other valid reasons. Any claimants requesting special privileges are referred to the examiner in charge of itinerant service for determination as to the reasonableness of the request. When exceptions are made, the reason is indicated under the "remarks" column of the claim record card. Claimants who fail to report according to the hour for which they are scheduled are required to wait until the last hour the representatives are at the itinerant point and are then served only after all claimants scheduled for that hour have been served. In actual practice the difficulties anticipated with the scheduling program failed to develop. The manager and itinerant personnel of the Bowling Green office are now greatly pleased with this method of controling traffic.

Consecutive handling of claimants.—The problem of serving claimants after they arrive at the itinerant point was solved by using the "meat counter" numbering system. A sign is placed near the entrance to the room where the representatives are to work, which requests applicants and claimants to take a number as they enter and to be seated. A spindle with durable cardboard numbers is placed immediately in front of the sign. As applicants or claimants come into the waiting room, they take a number from the spindle and await their turn. The local office representatives call the applicants or claimants in numerical sequence and take up the cardboard numbers and place them on another spindle on the work table. This method serves as a reception function and assures that claimants and applicants will be served in the order in which they report.

Supervision and staffing of itinerant service.—An interviewer-examiner is designated as responsible for all itinerant service and keeps the manager informed of any special problems that may arise from time to time so that corrective action may be taken. The normal staffing pattern for itinerant service is 2 examiners for the first 100 active claimants and 1 additional examiner for each additional hundred active claimants or part thereof. This staffing pattern is based on a schedule of at least 4 hours at the itinerant point. Itinerant schedules are prepared at the beginning of each calendar quarter and are based on the current and projected workload.

Selection of personnel for itinerant work.—The selection of personnel to work at itinerant points is based on the training of available personnel. In so far as possible, personnel selected for itinerant service are trained and experienced in application taking, new and continued claims taking, both intra- and interstate, selection and referral, counseling, employer visiting and conducting examiner investigations. The workload at itinerant points for any one day is often greater than the local office workload for that particular day, and in many instances all of the activities outlined above will be performed at the itinerant point. Since the number of personnel who usually go on itinerant service is considerably less than the number remaining in the office, it is basically important that well trained and efficient personnel be assigned to this service.

Equipment and supplies for use at itinerant points.—Standard equipment taken to itinerant points includes active and inactive application and claimant files, DICTIONARY OF OCCUPATIONAL TITLES and CODES, Unemployment Insurance Manuals, Examiner's Guide Cards, an adequate supply of all forms and office stamps, identification signs, copies of local office orders, current job inventories from Kentucky and other States in the region and tally sheets for recording activities. And, not the least necessary item of equipment is a dust cloth to remove the accumulation of dust that has gathered on unused tables, desks and chairs which will be put in service for the claimants and applicants.

Continuous service during hours scheduled.—During the hours scheduled at the itinerant point, continuous service is maintained—with at least one local office representative available at all times regardless of how small the volume of traffic.

Employer visiting.—A very selective employer visiting program is maintained at itinerant points. It is recognized there are few employers who can be effectively served at points a considerable distance from the local office when its representatives visit these points on a biweekly basis; however, there are certain types of employers that can be served at most itinerant points. These employers will be visited as the need arises, and in most instances the employer visiting is done after the last hour scheduled for serving claimants and applicants.

In Kentucky we have been convinced that the close scrutiny of local office operations, as performed in a test program, is worth while as witnessed by the improvement in one of our very vital activities—the itinerant service office.

WHY WORKERS QUIT

THE University of Illinois' Business Management Service has been asking workers throughout the State why they quit their jobs. The University's Service calculates that a State-wide worker turn-over of one in three costs Illinois employers about 50 million dollars a year.

One interesting finding was that three out of four people who quit their jobs voluntarily do so for reasons that *could be avoided by management action*, and then take another job almost exactly similar to the old one and paying about the same.

Thirty-nine percent of the workers questioned said they quit for what the university calls "supervisory problems." They disliked the company, their boss, or their job, or more likely, cited several of these objections in combination.

Actually only 22 percent of the workers surveyed gave their employer as the "real" reason for quitting. The rest more or less dodged a direct answer, naming only general dissatisfaction with their job.

When is a worker most likely to quit? The findings showed it was during the first couple of weeks on the new job. The university discovered the "most stable period" to be between 6 and 18 months after hiring.

Ohio Promotes Employment Opportunities

By EDWARD T. FOGO

Chief, Industry-Government Liaison
Ohio Bureau of Unemployment Compensation

OHIO recognizes clearly that the way to lower widespread unemployment in a community is to build up employment opportunities. Consequently when general concern over rising unemployment developed in the late summer of 1949, it was among the first States to conceive the idea of using its system of public employment offices as a means of helping employers secure Government contracts.

At this particular time, a number of plants in Ohio were either closing down or running with a skeleton labor force because of a lack of orders. In this emergency, we asked that the Ohio Bureau of Unemployment Compensation be permitted to serve as a clearing house for the dissemination of information about bids for items to be produced for the Federal Government.

Our plan was simple. It called for the Department of Defense and its procurement agencies to supply us with listings of invitations to bid, and for us to screen this information and pass it on to Ohio firms which were qualified to manufacture products on which bids were requested. This information would be channeled through our 82 local offices, which serve every county in Ohio.

From the local office, the Employer Service Representative would personally pass on the information to specific employers who might be interested in making bids. We already had a State-wide organization to perform this service. Our local office representatives visit employers in each community regularly. The only cost entailed would be the cutting and mimeographing of a few stencils.

Advantageous to Everyone

We believed that the plan had a number of advantages, not only from our own point of view, but from that of the employer, the worker and the general public. The idea was fundamentally sound. Viewed from every angle, it would be a positive, constructive effort to increase employment and, of course, to prevent a further rise in unemployment.

The plan was favored also because it would be the means of serving all employers—not just the few who were big enough to send representatives to Washington.

Another point in the plan's favor—and one which weighed heavily with us—was its potentialities for creating better employer acceptance for our local offices. It was our belief—since substantiated—that if we helped firms to get government orders in their hour of need, we would help fulfil the basic purpose of our agency—to help maximize employment in the area served. The soundness of this latter premise was well demonstrated in subsequent months.

Our next step was to assemble some basic information on specific Ohio areas which, if not already characterized as "critical" from a standpoint of mounting unemployment, were in a fair way of entering that classification because of lay-offs and factory shutdowns.

The test or "pilot" areas were selected. One was Kent, a city of some 11,000 population, located deep in the highly industrial section of northeastern Ohio. The other was Ironton, a city of nearly 19,000, situated on the banks of the Ohio—a western outpost of the nonindustrial southeastern part of Ohio.

The principal employer in Kent, who had had a monthly payroll of $500,000 at war-peak, had cut both employment and payroll more than half by November 1949. In a city of less than 11,000, such curtailment could prove a quite serious matter. To make things worse, the employer was thinking of closing down completely, and shifting residual operations to New York.

The situation in Ironton was equally serious. Here also there was a firm which had had an annual payroll, at war-peak, of $500,000. This company had reduced its employment to less than one-fifth by November 1, 1949. The payroll was reduced by almost as much. The plant had been offered for sale and was definitely on its way out. Also closed down in the community was another factory, which heretofore had provided a monthly payroll of $50,000.

As a result of this employment "recession," unemployment had risen in these two communities, as shown in the following figures on unemployment benefits:

	1948	*1949*
Kent	$188,244	$313,498
Ironton	286,002	549,582

This was the information we took to Washington in the early days of December 1949. The purpose of our meeting with officials of the Department of Commerce and the Department of Defense was to discuss Federal procurement policies and to discover how our plan could be made compatible within the framework of these policies.

We were not destined to have initial success. Our failure at this time stemmed primarily from the fact that neither Kent nor Ironton—nor any part of Ohio,

for that matter—was adjudged to be a "critical" or emergency area in terms of unemployment. Had any of these areas in Ohio, about which we were so deeply concerned, been officially designated as being "critical," an agency such as ours could receive all invitations to bid on defense contracts.

Our argument, of course, was that we were trying to prevent an area from reaching the "critical" stage. We stated, with irrefutable logic, that it was useless to inform a company of an opportunity to bid, after that firm had already gone out of business and had dispersed its working force (as had already happened in Ironton).

Second Phase of the Program

The second phase in the development of our program to aid employers began early in January, after the Department of Defense announced its plan to make information requesting bids, available generally throughout the country. Believing the time to be propitious for a rediscussion of our so-called Ohio Plan, we went to Washington for another series of conferences with officials of the Bureau of Employment Security, the Department of Defense, and the Department of Commerce. We learned now, that plans had undergone a change, and that dissemination of information on bids was to be effected through the various offices of the Department of Commerce.

Results of these conferences amounted to a tacit acceptance of our plan, provided that we obtained the approval of the Regional Department of Commerce office in Cleveland and were able to work out a satisfactory plan for distribution of the desired information. This was done; it was arranged that a representative of the Cleveland office of the BUC should call daily at the Regional Department of Commerce office, where he would be given a number of copies sufficient for the needs of the Cleveland office, and two or three copies to be trnasmitted to Columbus for reproduction and distribution.

The plan was carried out and became effective March 15. On May 1, a change was effected whereby the entire distribution was handled by the Field Service at Chicago, with Cleveland receiving its regular allotment of copies and the BUC at Columbus the same number as before. On May 24, it became possible to have all our local offices placed on the direct mailing list, thus eliminating a 1-day delay in transmittal from Columbus.

Plan Is Explained

Considerable spade work had to be done preparatory to the start of our program in Ohio. For some time prior to March 15, when the mailing of invitations to bid was scheduled to begin, we instituted a series of meetings with district and local office managers, explaining just what we hoped to accomplish and how we expected the plan to be carried out.

Publicity for the program was discussed and subsequently voted down. We wanted this service to be a talking point for our employer service representatives in their contacts with manufacturers, and we were fearful that a publicity effort might flood our offices with requests for information and thus cause the whole program to bog down.

Brings Good Will

Now we know that some publicity might have been helpful. Certainly, it would not have been harmful. From the very start, we began receiving favorable comments from our local office managers, revealing, for the most part, that employers were impressed by the new service, and that it was creating more good will for our local offices than any other program previously sponsored by the BUC.

A little more than a year has passed since the program got under way. Unemployment, of course, has greatly decreased. That which remains is relatively slight and sporadic. This development has caused us to emphasize the value of the contract awards lists, which are mailed to each of our offices every Thurdsay. We began to talk subcontracts to employers who were finding it difficult to obtain material needed for civilian production.

When lay-offs in the community are traceable to lack of work, due in turn to scarcity of materials, the local Employer Service Representative begins to look for prime contracts in the award lists calling for items which the local firm is qualified to produce. When he finds such a contract he brings it to the attention of the local employer, suggesting that it might be wise to try to obtain a subcontract.

Very often, the local employer may be interested, and his interest may stem from the fact that the prime contractor, and not he, will have to worry about materials. Our interest, of course, will lie in keeping the local plant going, and the workers employed.

Local office managers are not relying solely upon personal contacts to get invitations to bid before the local employer. They are encouraging potential bidders to check these listings daily as they come in, realizing that a few days' delay in learning about the request for bids may delay the submittal of the bid beyond the specified deadline.

Employers often benefit from the local office manager's suggestions. If the employer is concerned over the quantities demanded with regard to a specific item, and fears he will not be able to handle the order, he will be encouraged by the local office manager to disregard that feature until he has complete information. It may be that delivery will cover a period of several months, permitting the employer to complete the order, even with a relatively small working force.

Now, after a year or more of experience in bringing this information to employers, we are convinced of its feasibility and of its practical usefulness to the community. We believe, as the defense effort moves into a period of more intense activity, the function of the local BUC office in this aspect of defense production will have even greater significance.

Tipple and coal processing plant at the Glenbrook mine of the Stonega Coke & Coal Co. near Keokee, Va. While this is one of the larger operations, the scene is typical of the area served by the Appalachia local office.

Clearance Works

By HARRY J. WILLOUGHBY

Manager, Virginia State Employment Service, Appalachia, Va.

THIS is no saga of a concerted wholesale filling of jobs by mass recruitment. Rather, it is a story of common experiences in small local Employment Service offices—a tale of the hard way of getting people to work.

Ours, like many others, is a supply area. The two counties served, Wise and Lee, lie in the extreme southwestern tip of Virginia, pointing like an arrowhead into the angle formed by Kentucky and Tennessee, with the tip of the arrow lying at Cumberland Gap. The area reaches eastward from Cumberland Gap to St. Paul on the Clinch River, around 120 miles away. The chief industry in this area is bituminous coal mining. The population of the two counties is about 92,234.

It is interesting to note, in passing, that our office is closer to several other State capitols than it is to our own capitol in Richmond, and there are two local offices in bordering States which are closer to us than our nearest Virginia office.

Because of the fact that coal mining is the primary and major industry, local job openings outside the mines are comparatively few. Consequently many job hunters come to the office seeking information regarding job opportunities in other areas. By far the majority of these applicants have no particular skills to offer in the labor market. Yet there are a number of skilled people, as well as clerical workers and some professional persons, who apply for this service.

During World War II years, clearance recruitment was largely a matter of record keeping, what with as many as five recruiting representatives in the office at the same time. We remember one month when this office sent 300 people to Portsmouth to work in the Navy's shipyard across the river from Norfolk. But with the passing of those rapid-hire days, the business of matching workers with clearance job openings again became a skilful art and we found that we had to know what our applicants could do in detail, before we could properly make a clearance referral.

The one major obstacle we had to overcome was our own mental attitude toward the new clearance

Staff meeting in the Appalachia local office. Left to right: G. R. Francis, claims clerk; C. G. Jeter, claims deputy; Harry J. Willoughby, manager; Mildred Calton, clerk-typist; and Lucille Beasley, interviewer.

situation in which we found ourselves. There were many instances, we told ourselves, when it wouldn't work. Most of the clearance openings were from offices in the eastern part of the State, and we were far away (400 miles from Richmond, 500 from Alexandria and the coastal area). As a result, even though the applicants were well-qualified, offices nearer the scene of action would beat us to the draw.

Yet in spite of the various handicaps, including our own doubts, our applications began to click. There were a number of factors involved which should be worth mentioning. Proper use of the tools at hand is always very important. It should not need to be cited, but we found that the "obvious" tends to become dull because of its very nearness, and often the user neglects full application of a vital operation.

First of all there is our own State INVENTORY OF JOB OPENINGS. The Inventory usually lists from 150 to 200 job openings throughout the State. This list is thoroughly checked against the active application file each time a new edition is received from the Central Office. Incoming Clearance Orders receive the same treatment. And we found that, in some instances, even though Occupational Titles and Classification Codes on the application cards corresponded with those on the orders and the Inventory, more information was needed from the applicant regarding what he did on the job before a clearance referral could be made.

This led to closer application of interviewing techniques all down the line, including the more careful use of the DICTIONARY OF OCCUPATIONAL TITLES, OCCUPATIONAL GUIDES, and other tools.

But most important of all, we learned that when we rid ourselves of our own doubts regarding the clearance program, it did begin to work. We had to sell ourselves—that was, in one way, the biggest stumbling block of all—and then work at it.

Our office serves three itinerant points within the two counties, and at these outlying points the claim load and the applicant load is heavy. Applicants interviewed at these places who may desire consideration for clearance referral are invited to the local office at their convenience for a more thorough interview. This policy has resulted in better service to the applicant.

A review of recent clearance activity shows the following: Total clearance referrals, 38; hired and entered on job, 14; failed to report, 3; refused job after acceptance, 1; jobs filled, 5; employer rejections, 12; employer plans changed, 2; pending verification, 1; applications submitted and accepted, 18.

Following through, we find that 47.3 percent of the applications were accepted, and that 36.8 percent of the applicants whose applications were submitted actually went to work.

One of the most valuable tools in the operation of the clearance procedure is the INVENTORY OF JOB OPENINGS, mentioned before. The Virginia Inventory carries, as a supplement to job openings, a listing of selected available applicants. There are around 50 names carried in each issue of the Inventory. In addition to the names of the applicants, information concerning each individual's age, veteran status, education, training, experience, occupational title and code, and the name of the local office where he is registered is stated.

When the inventory is received in the local office, the applicant summary is checked against the active orders on file. In this manner, we locate qualified

Members of the Appalachia, Va., local office staff at work at an itinerant point in the Town Hall, Coeburn, Va. Seated at the table, left to right: Lucille Beasley, interviewer; C. G. Jeter, claims deputy; G. R. Francis, claims clerk; and Mildred Calton, clerk-typist.

applicants who otherwise might never have been uncovered.

This applicant summary phase of clearance works, too. Of the 14 people who entered on jobs, as shown above, two were placed as a direct result of order-holding offices contacting us for further information about applicants whose qualifications we had listed on the inventory supplement.

The time required to complete the transaction in some instances causes the applicant some concern. In the cases of those who were hired, an average of 3 weeks from the date final verification was made was required to complete the transaction. The shortest length of time required was 6 days. The longest elapsed time was 9 weeks. This would seem to indicate that employers, in some instances, were rather deliberate in making their decisions.

On the other hand, rejections came through more quickly. An average of 1.43 weeks was required on the rejected applications. The longest time taken on any one rejection was 3 weeks. The shortest was 3 days.

In spite of the fact that clearance isn't as easily handled as we might wish, it will work. But it won't unless we work at it. And when we sit down and take stock, we get a pretty good feeling about it down deep inside ourselves. In our case, it gives us the feeling of being just as competent to serve all needs of all applicants, although on a smaller scale, as our bigger counterparts.

Then, like the old settler who emerged slowly from under the bed after his wife had shot the invading bear, we can look around and say,

"Look what WE done!"

Little Rhody Lends Big Hand to School Drop-out

By **RUTH SILBERMAN**

Employment Counselor, Rhode Island State Employment Service

RHODE ISLAND is a very small State—the smallest in the Union. If you dropped all of it (which we hope you never will) into the State of Texas, it would leave only a small dent. Rhode Island, however, is the most densely populated of the States. Where there are 728 people to each square mile, unemployment becomes of vital concern to every resident. Added to the ranks of unemployed in our labor force, there are hundreds of students who leave classrooms long before high-school graduation. Why do they leave? A survey reported in the EMPLOYMENT SECURITY REVIEW for July 1950 showed that 36 percent of the students leaving school before the twelfth grade gave the reason "prefer to work." This is where the Employment Service and particularly its counseling program takes a step into the picture.

Our counseling department in the Providence office works on a full-time schedule to help any individual with an employment problem. More and more evident among its constant visitors is the school drop-out. Each interviewer and all other personnel who come in contact with these applicants receive a copy of our "Interviewing Guides for Employment Counseling." In these guides, the school drop-out problem occupies

a prominent place, with valuable clues for recognizing potential counselees. The following examples show how constructive counseling, as indicated in the guide, can be utilized in our employment offices.

Phyllis was a shy attractive girl who had been in the ungraded or special class at school. Soon after her sixteenth birthday she came into the office with her mother, and poor Phyllis didn't get a chance to say a single word. Her mother told the counselor that "her Phyllis" wasn't too bright but she could do some kind of work. The counselor felt that an interview with the applicant alone would prove more fruitful than an interview jointly or solely with the mother.

Phyllis was scheduled for the GENERAL APTITUDE TEST BATTERY and her school records were requested from our local school department. Her test revealed low general learning ability, verbal aptitude, and numerical aptitude, but her motor speed, finger dexterity, and manual dexterity were well above the minimum score. Her scholastic record showed difficulty in vocabulary, reading comprehension, and mathematical fundamentals.

Phyllis had a perfect attendance record and had made several attractive dresses in the sewing classes. Here was something with which we could work. When Phyllis again visited our office, the counselor complimented her on the attractive outfit she was wearing. Phyllis said she loved to sew. The outcome was that she was placed as a learner sewing-machine operator and is extremely happy at her job.

George never liked school. He played "hooky" as often as he could and was very saucy to his teachers. He came into the office with an almost perceptible chip on his shoulder. "I wanna job making good money, see?" The counselor saw.

The applicant was wearing bicycle clips on his dungarees. Bicycling—that would be a good opening subject. Sure, he liked to bicycle—why, he put the bike together many times in his dad's machine shop at home. He fixed bikes for all the kids on the street. Surely this was a clue to George's talents.

It took a little persuasion to get George to take the aptitude tests—he didn't like the idea of tests at all. But we told him we just wanted to see how well he worked with his hands and fingers, how good he was in mathematics, etc., and just what type of work he might be able to do. He admitted he liked to work arithmetic problems. His school records substantiated this interest in mathematics. They also showed consistently good grades in work in the machine shop. His GENERAL APTITUDE TEST BATTERY showed high learning ability, good numerical aptitude, and high finger and manual dexterity. George should certainly make a good scholar, but felt that school work was "sissy" stuff.

We discussed the fields of auto repairing, carpentry, machinist. George read over our Occupational Guides and settled on automotive mechanics. He realized, of course, that additional training would be required. George is now attending Trade School studying very hard and liking it.

Then there was Mary. Mary had infantile paralysis when a child and it left her with a pronounced limp. The Social Welfare Department had referred her to us for placement. She had little schooling because of her difficulty in traveling and also because she was subject to epileptic seizures of the petitmal type. Her family's financial condition was such that little help for the girl could be expected.

Mary, although timid, was extremely neat and personable. We referred her to the Division of Vocational Rehabilitation (a community agency with which we work "hand in glove") for a medical examination. The doctor reported that with a special brace and adequate therapy Mary would be able to walk with ease; that her seizures were infrequent and could be controlled by medication.

After occupational therapy was successfully administered, Mary again reported to this office and aptitude tests were given to her. These, in conjunction with interest tests, showed a strong leaning toward office work, particularly typing. Vocational Rehabilitation arranged a typing course at a local business school and Mary is now doing a good job as a typist in a local manufacturing concern.

These are typical cases of school drop-outs. They sound too successful? Well, we didn't cite the applicants who do not find jobs after our service; who do not find suitable training; and, of course, we cannot tell of all those who do not visit our offices. Those who do, however, feel that something has been done for them and someone has been interested in them. We have so many tools at hand: our testing program, Occupational Guides, Occupational Handbook, Job Guide for Young Workers, recreational centers, youth serving agencies, school catalogs, agency contacts, advisory panels, and labor market information.

The job of assisting these young people does not rest solely with the Employment Service and its cooperating agencies; it is a family and community problem as well. Parents should be made aware of the many difficulties awaiting their children who drop out of school before graduation to seek employment. They are young, inexperienced, and, in many cases, in danger of contacts that may turn them into delinquents. An educational program must be worked out with community agencies, such as the parent-teacher associations, to acquaint all concerned with the factors involved in this vital problem. With everyone working together, we can do much to help school drop-outs during the difficult period of transition from the inexperience of youth to the time when these young people become contributing members of society.

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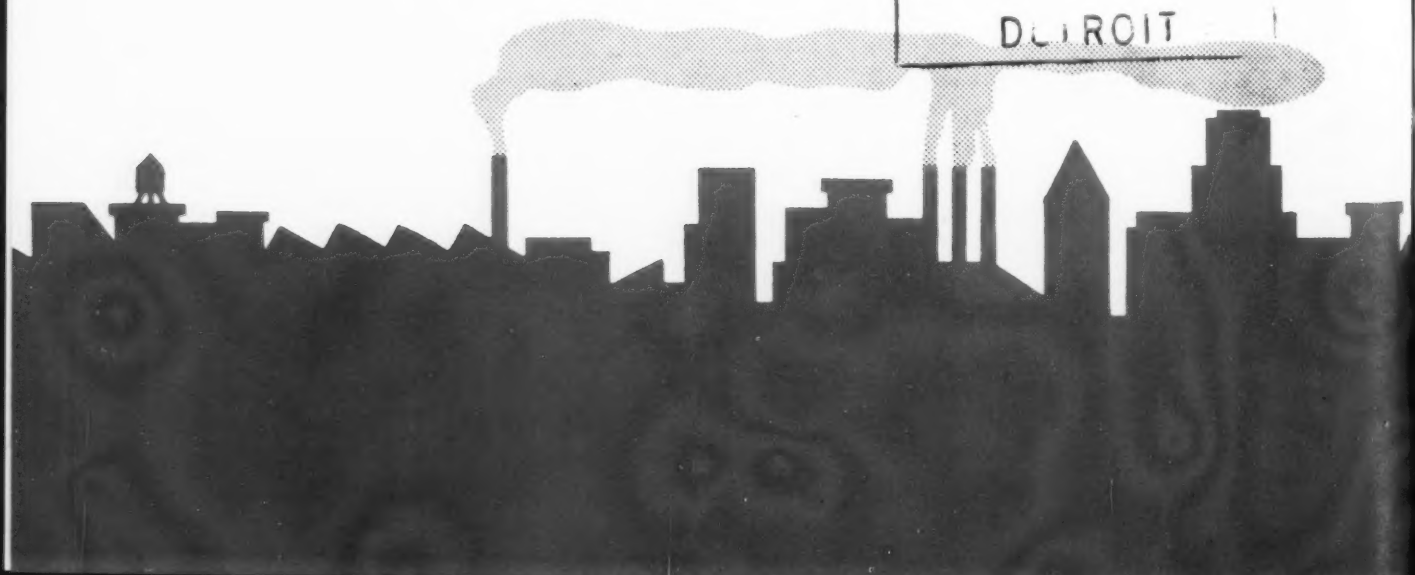
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